# Third Quarter 2013 Quarterly Monitoring Report Baldwin Hardware Corporation Reading, Pennsylvania

14 October 2013

WO# 193807

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1.0 1.1		ODUCTION ground	1 1
2.0 2.1 2.2 2.3	Groui	ITORING RESULTS nd Water Monitoring Data ment System Monitoring eport	3 3 4 4
3.0	PRO	GRESS REPORT	4
LIST OF FIG	GURES		
FIGURE 1	GRO	UND WATER ELEVATION COUNTOUR MAP, 20 AUGUST 2013	
LIST OF TA	BLES		
TABLE 1		ANIC GROUND WATER QUALITY DATA FOR THIRD QUARTE SAMPLING	R
TABLE 2		RGANIC GROUND WATER QUALITY DATA FOR THIRD RTER 2013 SAMPLING	
TABLE 3		ER LEVEL DATA FOR 1996 THROUGH 2013 QUARTERLY PLING	
TABLE 4	CON	THLY TREATMENT SYSTEM INFLUENT AND EFFLUENT TCE CENTRATIONS FROM 1995 THROUGH 2013 QUARTERLY PLING	
APPENDIC	ES		
APPENDIX	$\boldsymbol{A}$	LABORATORY ANALYTICAL REPORT	
APPENDIX	В	PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES WATER QUALITY REPORTING FORMS	

#### 1.0 INTRODUCTION

The Baldwin Hardware Corporation business, formerly owned by Stanley Black and Decker, was sold to Spectrum Brands in December, 2012. Ownership of the property at 841 E. Wyomissing Blvd., Reading, PA, formerly known as the Baldwin Hardware Corporation manufacturing site, remains with Stanley Black and Decker. Stanley Black and Decker continues to operate the groundwater remediation system at the site. References in this report to Baldwin Hardware Corporation should be interpreted within the context of the transaction described above.

This Third Quarter 2013 Monitoring Report has been prepared for Baldwin Hardware Corporation (Baldwin), Reading, Pennsylvania by Environmental Resources Management, Inc. (ERM). Quarterly monitoring and reporting is conducted at the Baldwin plant in accordance with the Administrative Order on Consent (Consent Order) executed between Baldwin and the U.S. Environmental Protection Agency (EPA) Region III. This report includes the following: results of the well sampling and analyses; water level elevations for the wells and piezometers; the treatment system influent and effluent analyses for trichloroethene (TCE) concentrations; a quality control (QC) report; and a quarterly progress report.

#### 1.1 Background

ERM

The Baldwin site is located approximately one-half mile southwest of the Schuylkill River in Reading, Pennsylvania. Custom brass hardware is manufactured at the plant. Pursuant to the Consent Order, Baldwin installed a ground water recovery, monitoring, and treatment system for remediation of volatile organic compounds (VOCs) in ground water. It was determined that TCE was released to the environment from former drying beds. The quarterly ground water monitoring system consists of the following elements:

- Three pumping wells (PW-5, PW-4, and PS-1);
- Two back-up pumping wells (PS-2 and PS-3);
- Four monitoring wells (OW-1, OW-2, OW-3S, OW-3D); and
- Ten piezometers (P-1, P-2, P-3S, P-3I, P-3D, P-4S, P-4I, P-4D, P-5S, and P-5D).

BALDWIN-152559-10/14/13

1

The locations of the wells are shown on Figure 1. Figure 1 also shows nearby wells (MW-3, 4, 6, 7) owned by Interstate Container Corporation which have been used in the past to provide supplementary water level data.

The recovery wells pump constantly at a rate of about 300 gallons per minute. The recovery system was activated in April 1988 and has functioned constantly since that time. The recovered ground water is treated by an air stripping tower and then used for plant processes. Any excess treated water is discharged with other plant NPDES wastewater streams in accordance with the Baldwin Pennsylvania Department of Environmental Protection (PADEP) -approved discharge permit.

In addition to ground water monitoring, the treatment system is also monitored on a monthly basis for TCE. The treatment system monitoring is performed at the following points:

- Tower influent to the treatment system;
- Tower effluent from the treatment system;
- Well PW-5 effluent, prior to treatment;
- Well PW-4 effluent, prior to treatment;
- Well PS-1 effluent, prior to treatment; and
- Well PS-2 effluent, prior to treatment.

Details of the recovery, monitoring, and treatment system are provided in the *Purge and Treatment System Certification Report*, 2 September 1988, prepared by Keck Consulting Services, Inc.

Water level measuring, well sampling, and analysis were performed by M. J. Reider Associates, Reading, Pennsylvania on 20 August 2013. The pump in PS-1 is damaged and not functioning; therefore no samples were collected from this location. Baldwin Hardware is currently assessing the feasibility of repairing the pump. In the interim, back-up pumping well PS-2, which is relatively close to PS-1 has been operated consistently for several years and continues to operate properly. The total flow rate to the treatment system has remained constant at 300 gpm.

Sample collection, handling, analysis, and QC sampling were performed in accordance with the protocols outlined in the Consent Order documents. In brief, the ground water samples collected from the two pumping wells, two back-up pumping wells and four monitoring wells were analyzed for VOCs by EPA Method 8260, selected total and dissolved metals, and general water quality parameters. Additionally, the

treatment system samples were analyzed monthly for select VOCs (including TCE) by Baldwin's internal laboratory using EPA Method 624.

#### 2.0 MONITORING RESULTS

#### 2.1 Ground Water Monitoring Data

The results of the Third Quarter 2013 well sampling and analysis for VOCs are summarized in Table 1. The inorganic analyses are summarized in Table 2. The complete laboratory report is provided in Appendix A. The results are also reported on the Pennsylvania Department of Environmental Protection (PADEP) *Form 19 Quarterly and Annual Water Quality Analyses* provided in Appendix B.

The VOC results for the Third Quarter sampling are generally consistent with past quarterly sampling results. TCE has continued to decrease in well PS-2 from 643 micrograms per liter ( $\mu$ g/l) in Fourth Quarter 2002 to 1.3  $\mu$ g/l detected in Second Quarter 2013. Similar trends have been observed for the following wells:

- PS-1 The highest reported TCE concentration was 731  $\mu$ g/l measured in 1993. Although this well was not sampled during the second quarter of 2013, TCE levels at this well have been below 20  $\mu$ g/l since 2005;
- PW-4 The highest reported TCE concentration was 1395  $\mu g/l$  measured in 2003. TCE concentrations have been below 80  $\mu g/l$  since 2009 and below 50  $\mu g$  for the last two years; and
- OW-2 The highest reported TCE concentration was 1200  $\mu$ g/1 measured in 2002. The TCE concentrations have been below 20  $\mu$ g/1 since 2006.

Federal Secondary Drinking Water Standards were exceeded in two of the monitoring wells for total iron and manganese (OW-3S and PS-3). The Federal Primary Drinking Water Standard was exceeded in one well (OW-3S) for total chromium and nickel. Total analysis are likely biased high due to the presence of suspended sediments in the sample, and are not indicative of metals that can migrate through the ground water system.

One ground water sample exceeded the Federal Secondary Drinking Water Standard for dissolved manganese (PS-3). Dissolved concentrations are more indicative than total concentrations of metals that can migrate through the ground water system.

The water level data are provided in Table 3; ground water potentiometric contours for the Third Quarter event are shown on Figure 1. Water levels were measured in most of the wells prior to evacuation and sampling. Water levels were not measured at PS-1, PS-2, PS-3, P-3I, P-3D and P-4D. The Third Quarter 2013 water levels are consistent with prior water levels, indicating that the direction of ground water flow under pumping conditions remains consistent.

#### 2.2 Treatment System Monitoring

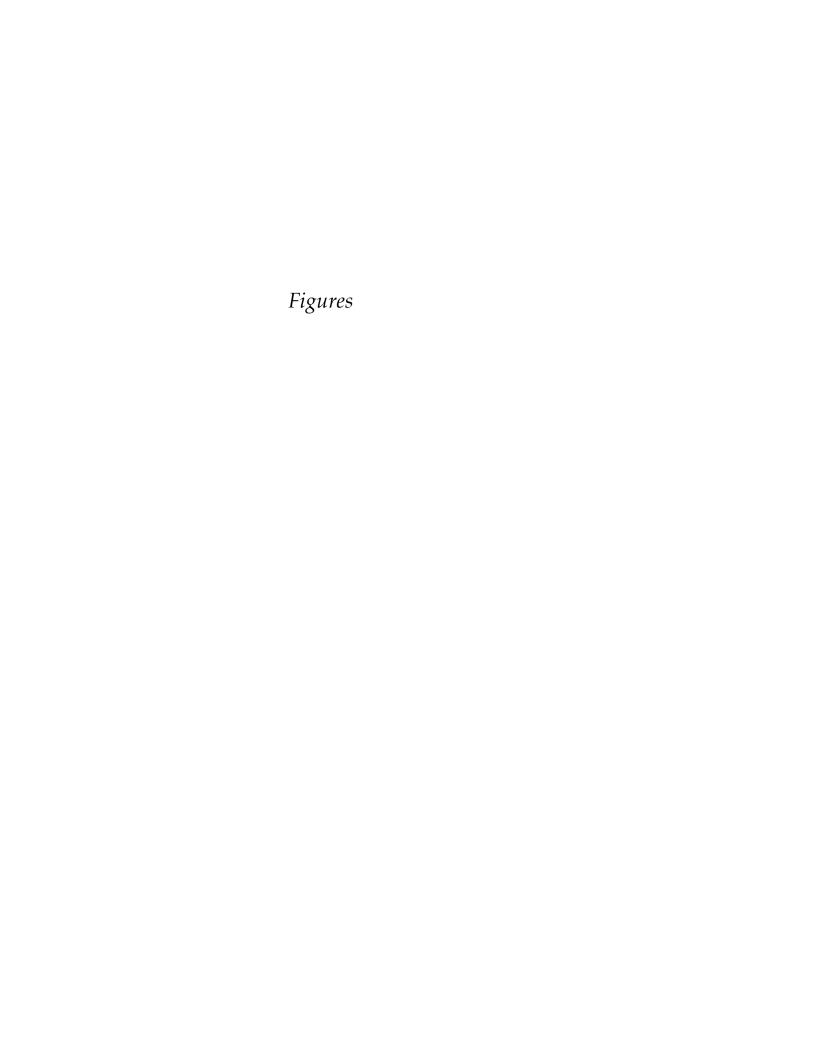
The results of the monthly treatment system monitoring for TCE are provided in Table 4. The August sample collection did not occur at its usual time, therefore, two samples were collected during September. As shown, the reported tower influent TCE concentrations ranged between 32 and 68  $\mu$ g/l. Effluent concentrations were non-detect at a detection limit of 5  $\mu$ g/l, indicating that the treatment system is functioning properly. The target effluent concentration for TCE is less than 100  $\mu$ g/l.

#### 2.3 QC Report

The results of the QC sampling for VOCs, metals and general water quality parameters are provided in Appendix A. None of the VOCs detected in the well samples were detected in the trip blank, field blank or bailer rinsate blank samples. No VOCs were detected in the method blank. The matrix spike sample recoveries, the standard sample results, and the laboratory field duplicate results were all generally within acceptable levels. The data is accurate, precise, and complete in accordance with the level of QC required by the Consent Order.

#### 3.0 PROGRESS REPORT

Compliance activities performed for the Third Quarter 2013 period include well and treatment system sampling and analysis, the collection of water level measurements in the wells and piezometers, as described above, and reporting. With the timely submission of this report, all compliance activities and deadlines will have been met. The recovery and treatment system at the Baldwin site continues to operate as designed and as approved by U.S. EPA.



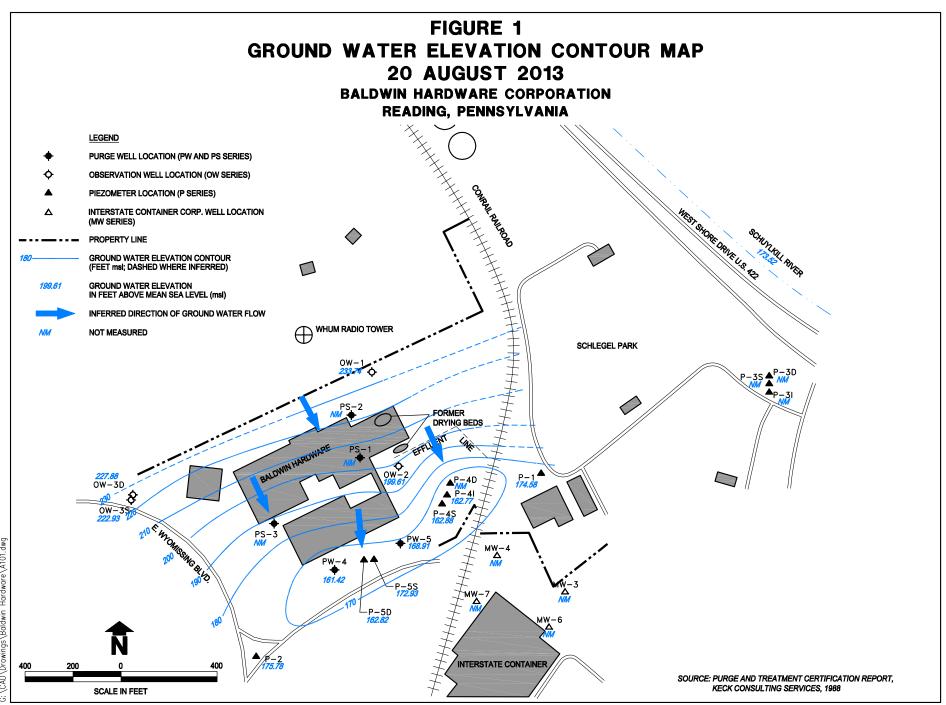




Table 1
Organic Ground Water Quality Data for 3rd Quarter 2013 Sampling
Baldwin Hardware Corporation, Reading, Pennsylvania

		WELLS								
Detected Volatile Organic Compounds (µg/l)	OW-1	OW-2	OW-3S	OW-3D	PS-1	PS-2	PS-3	PW-4	PW-5	OW-2 Duplicate
Trichloroethene	ND	4.4	ND	ND	NS	0.6	0.8	1.2	45	4.4
Cis-1,2-Dichloroethylene	ND	3.6	ND	ND	NS	ND	ND	1.3	7.4	3.7
Tetrachloroethylene	ND	ND	ND	ND	NS	ND	ND	0.6	1.8	ND
1,1-Dichloroethane	ND	ND	ND	ND	NS	ND	ND	0.6	ND	ND
Ethylbenzene	ND	ND	ND	ND	NS	ND	1.1	ND	ND	ND
Toluene	ND	ND	ND	ND	NS	ND	0.5	ND	ND	ND
Benzene	ND	ND	ND	39.4	NS	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	1.7	NS	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	NS	1.6	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	NS	ND	ND	2.2	1.2	ND

Detected Volatile Organic Compounds (μg/l)	Trip Blank 8/20/2013	Field Blank 8/20/2013	Bailer Rinsate 8/20/2013
None	ND	ND	ND

ND - Not detected at or above laboratory reporting limits of 0.5 to 10  $\mu$ g/l.

NS- Not Sampled during the this event.

μg/I - Micrograms per liter.

Table 2
Inorganic Ground Water Quality Data for 3rd Quarter 2013 Sampling
Baldwin Hardware Corporation, Reading, Pennsylvania

			WELLS								
Chemistry (mg/l)	Standards	OW-1	OW-2	OW-3S	OW-3D	PS-1	PS-2	PS-3	PW-4	PW-5	OW-2 Duplicate
Specific Conductance (µmhos)		464	708	875	501	NS	722	376	969	822	708
pH (standard units)	6.5-8.5 S	7.4	7.4	6.5	7.4	NS	7.1	8.0	6.6	7.6	7.4
Sulfate	250 S	19	73	40	31	NS	60	62	66	44	72
Total Organic Carbon		<.5	8.0	0.6	0.6	NS	0.8	1	0.7	<.5	0.5
Chloride	250 S	4	37	90	7	NS	34	<1	94	66	37
Cyanide, Total	0.2 *	<.004	<.004	<.004	<.004	NS	< 0.004	<.004	<.004	<.004	<.004
Phenols		<.01	<.01	<.01	<.01	NS	<.01	<.01	<.01	<.01	<.01
Total Metals (mg/l)											
Barium	2.0 P	0.045	0.048	0.186	0.113	NS	0.055	0.060	0.108	0.124	0.047
Cadmium	0.005 P	<.0005	<.0005	<.0005	<.0005	NS	<.0005	<.0005	<.0005	<.0005	<.0005
Chromium	0.1 P	0.0020	0.0023	1.95	0.0037	NS	0.0056	0.0013	0.0053	0.0023	0.0024
Copper	1.0 S	<.001	<.001	0.034	<.001	NS	0.004	0.012	0.002	<.001	<.001
Iron	0.3 S	0.04	0.02	9.47	0.13	NS	<.02	0.58	<.02	<.02	0.03
Lead	0.015 P	<.001	<.001	<.001	<.001	NS	0.001	0.003	<.001	<.001	<.001
Manganese	0.05 S	<.001	<.001	0.231	0.005	NS	0.002	0.192	<.001	0.003	0.001
Nickel	0.1 P	0.0031	0.0050	0.166	0.0029	NS	0.0054	0.0030	0.0051	0.0054	0.0051
Silver	0.1 S	<.0005	<.0005	<.0005	<.0005	NS	<.0005	<.0005	<.0005	<.0005	<.0005
Sodium		1.0	27.1	37.3	1.3	NS	10.9	0.9	43.5	30.3	26.8
Zinc	5.0 S	0.011	0.212	0.005	<.005	NS	0.013	0.201	0.008	0.013	0.222
Dissolved Metals (mg/l)											
Barium	2.0 P	0.049	0.048	0.154	0.120	NS	0.054	0.058	0.110	0.120	0.044
Cadmium	0.005 P	<.0005	<.0005	<.0005	<.0005	NS	<.0005	<.0005	<.0005	<.0005	<.0005
Chromium	0.1 P	0.0020	0.0021	0.0032	0.0015	NS	0.0058	0.0015	0.0054	0.0027	0.0023
Copper	1.0 S	0.001	<.001	<.001	<.001	NS	0.003	0.014	0.002	0.001	<.001
Iron	0.3 S	<.02	<.02	<.02	0.12	NS	<.02	0.08	<.02	<.02	<.02
Lead	0.015 P	<.001	<.001	<.001	<.001	NS	<.001	<.001	<.001	<.001	<.001
Manganese	0.05 S	<.001	<.001	0.005	0.005	NS	<.001	0.185	<.001	<.001	<.001
Nickel	0.1 P	0.0029	0.0048	0.0651	0.0034	NS	0.0042	0.0028	0.0054	0.0056	0.0051
Silver	0.1 S	<.0005	<.0005	<.0005	<.0005	NS	<.0005	<.0005	<.0005	<.0005	<.0005
Zinc	5.0 S	0.022	0.205	<.005	<.005	NS	0.008	0.090	0.009	0.012	0.214

<sup>&</sup>lt; - Not detected at or above indicated laboratory reporting limit.

NS - Not sampled during this quarterly event.

<sup>\*</sup> No standard exists for total cyanide, value is for free cyanide.

mg/l - Milligrams per liter.

<sup>--- -</sup> No standard, S - Secondary Drinking Water Standard, P - Primary Drinking Water Standard Shaded values exceed either the Primary or Secondary Federal Drinking Water Standard.

Table 3
Water Level Data for 1996 through 2012 Quarterly Sampling
Baldwin Hardware Corporation, Reading, Pennsylvania

	0	Depth to	Water	Depth to	Water	Depth to	Water
	Surveyed	Water	Level	Water	Level	Water	Level
Well	Top of Casing Elevation*	(feet) 4/3/1997	Elevation* 4/3/1997	(feet) 7/28-29/97	Elevation* 7/28-29/97	(feet) 10/27-28/97	Elevation* 10/27-28/97
OW-1	292.60	58.33	234.27	66.02	226.58	69.58	223.02
OW-2	251.92	48.77	203.15	57.33	194.59	56.77	195.15
OW-3S	269.37	43.60	225.77	46.47	222.90	47.34	222.03
OW-3D	269.37	40.97	228.40	43.69	225.68	46.91	222.46
PS-1	257.71	75.38	182.33	136.80	120.91	144.60	113.11
PS-2	260.11	78.79	181.32	68.30	191.81	89.00	171.11
PS-3	249.51	130.05	119.46	82.40	167.11	58.00	191.51
PW-4	234.97	73.91	161.06	85.75	149.22	90.20	144.77
PW-5	224.11	54.57	169.54	66.50	157.61	72.97	151.14
P-1	206.90	29.63	177.27	33.23	173.67	36.18	170.72
P-2	232.92	52.47	180.45	57.22	175.70	57.00	175.92
P-3S	191.84	12.10	179.74	13.17	178.67	13.64	178.20
P-3I	191.87	14.10	177.77	15.10	176.77	15.30	176.57
P-3D	192.00	11.92	180.08	12.76	179.24	13.21	178.79
P-4S	239.15	66.62	172.53	79.62	159.53	79.90	159.25
P-4I	239.15	66.66	172.49	81.19	157.96	87.53	151.62
P-4D	239.15	58.79	180.36	67.22	171.93	70.97	168.18
P-5S	231.55	50.20	181.35	73.58	157.97	79.91	151.64
P-5D	232.23	61.75	170.48	74.04	158.19	80.25	151.98
RIVER	215.77	42.57	173.20	43.43	172.34	44.32	171.45

	Surveyed Top of Casing	Depth to Water (feet)	Water Level Elevation*	Depth to Water (feet)	Water Level Elevation*	Depth to Water (feet)	Water Level Elevation*
Well	Elevation*	4/29-30/99	4/29-30/99	7/22-23/99	7/22-23/99	10/21-22/99	10/21-22/99
OW-1	292.60	59.78	232.82	69.38	223.22	70.03	222.57
OW-2	251.92	53.65	198.27	57.47	194.45	57.97	193.95
OW-3S	269.37	46.95	222.42	48.28	221.09	47.22	222.15
OW-3D	269.37	44.10	225.27	49.08	220.29	46.57	222.80
PS-1	257.71	173.70	84.01	210.60	47.11	208.90	48.81
PS-2	260.11	39.25	220.86	92.58	167.53	88.70	171.41
PS-3	249.51	32.32	217.19	33.80	215.71	47.48	202.03
PW-4	234.97	87.07	147.90	84.51	150.46	84.91	150.06
PW-5	224.11	65.46	158.65	66.65	157.46	68.02	156.09
P-1	206.90	32.71	174.19	34.79	172.11	33.14	173.76
P-2	232.92	57.53	175.39	60.07	172.85	59.10	173.82
P-3S	191.84	12.81	179.03	13.67	178.17	12.57	179.27
P-3I	191.87	15.47	176.40	15.68	176.19	15.20	176.67
P-3D	192.00	12.44	179.56	12.98	179.02	11.88	180.12
P-4S	239.15	79.79	159.36	80.02	159.13	79.90	159.25
P-4I	239.15	80.55	158.60	81.99	157.16	82.57	156.58
P-4D	239.15	64.64	174.51	67.69	171.46	66.92	172.23
P-5S	231.55	73.07	158.48	74.44	157.11	74.89	156.66
P-5D	232.23	73.70	158.53	75.11	157.12	75.22	157.01
RIVER	215.77	43.65	172.12	44.06	171.71	43.13	172.64

<sup>\*</sup> Feet above mean sea level.

NM - Not Measured.

Table 3 (cont.)
Water Level Data for 1996 through 2012 Quarterly Sampling
Baldwin Hardware Corporation, Reading, Pennsylvania

	Surveyed	Depth to Water	Water Level	Depth to Water	Water Level	Depth to Water	Water Level
	Top of Casing	(feet)	Elevation*	(feet)	Elevation*	(feet)	Elevation*
Well	Elevation*	7/18-19/01	7/18-19/01	10/17-18/01	10/17-18/01	1/15-16/02	1/15-16/02
OW-1	292.60	58.56	234.04	70.00	222.60	70.00	181.92
OW-2	251.92	57.44	194.48	58.00	193.92	55.55	196.37
OW-3S	269.37	46.53	222.84	47.90	221.47	48.58	220.79
OW-3D	269.37	44.14	225.23	47.60	221.77	46.80	222.57
PS-1	257.71	198.00	59.71	69.23	188.48	61.84	195.87
PS-2	260.11	138.15	121.96	94.51	165.60	55.15	204.96
PS-3	249.51	30.16	219.35	30.65	218.86	31.85	217.66
PW-4	234.97	74.95	160.02	79.10	155.87	82.50	152.47
PW-5	224.11	63.18	160.93	67.35	156.76	70.45	153.66
P-1	206.90	31.70	175.20	34.93	171.97	36.15	170.75
P-2	232.92	56.13	176.79	60.12	172.80	61.90	171.02
P-3S	191.84	12.90	178.94	13.94	177.90	NM	
P-3I	191.87	15.56	176.31	16.00	175.87	NM	
P-3D	192.00	12.46	179.54	13.15	178.85	NM	
P-4S	239.15	76.31	162.84	79.55	159.60	80.02	159.13
P-4I	239.15	76.55	162.60	81.72	157.43	84.81	154.34
P-4D	239.15	64.57	174.58	66.97	172.18	67.55	171.60
P-5S	231.55	68.80	162.75	74.03	157.52	77.90	153.65
P-5D	232.23	69.72	162.51	74.90	157.33	76.80	155.43
RIVER	215.77	43.58	172.19	43.96	171.81	43.95	207.97

	Surveyed Top of Casing	Depth to Water (feet)	Water Level Elevation*	Depth to Water (feet)	Water Level Elevation*	Depth to Water (feet)	Water Level Elevation*
Well	Elevation*	7/15-16/03	7/15-16/03	10/14-15/03	10/14-15/03	1/13-14/04	1/13-14/04
OW-1	292.60	54.33	238.27	65.03	227.57	52.61	239.99
OW-2	251.92	55.43	196.49	51.11	200.81	52.65	199.27
OW-3S	269.37	45.50	223.87	46.00	223.37	45.93	223.44
OW-3D	269.37	39.70	229.67	41.03	228.34	39.37	230.00
PS-1	257.71	NM		NM		NM	
PS-2	260.11	NM		NM		NM	
PS-3	249.51	NM		NM		NM	
PW-4	234.97	85.00	149.97	81.04	153.93	NM	
PW-5	224.11	62.41	161.70	62.00	162.11	NM	
P-1	206.90	30.25	176.65	31.01	175.89	29.92	176.98
P-2	232.92	53.76	179.16	55.31	177.61	53.10	179.82
P-3S	191.84	NM		NM		NM	
P-3I	191.87	NM		NM		NM	
P-3D	192.00	NM		NM		NM	
P-4S	239.15	61.00	178.15	77.19	161.96	73.31	165.84
P-4I	239.15	74.79	164.36	77.11	162.04	73.31	165.84
P-4D	239.15	74.81	164.34	61.91	177.24	59.45	179.70
P-5S	231.55	NM		NM		65.85	165.70
P-5D	232.23	NM		NM		NM	
RIVER	215.77	44.02	171.75	37.41	178.36	43.16	172.61

<sup>\*</sup> Feet above mean sea level.

NM - Not Measured.

Table 3 (cont.)
Water Level Data for 1996 through 2012 Quarterly Sampling
Baldwin Hardware Corporation, Reading, Pennsylvania

		Depth to	Water	Depth to	Water	Depth to	Water
	Surveyed	Water	Level	Water	Level	Water	Level
	Top of Casing	(feet)	Elevation*	(feet)	Elevation*	(feet)	Elevation*
Well	Elevation*	7/11-	12/05	10/11	-12/05	1/12-	-13/06
OW-1	292.60	56.91	235.69	65.19	227.41	60.55	232.05
OW-2	251.92	50.64	201.28	53.11	198.81	55.95	195.97
OW-3S	269.37	46.51	222.86	46.90	222.47	46.58	222.79
OW-3D	269.37	42.00	227.37	43.39	225.98	42.46	226.91
PS-1	257.71	76.50	181.21	NM		NM	
PS-2	260.11	50.71	209.40	36.85	223.26	NM	
PS-3	249.51	20.72	228.79	29.57	219.94	NM	
PW-4	234.97	82.75	152.22	96.35	138.62	91.69	143.28
PW-5	224.11	57.19	166.92	61.52	162.59	58.62	165.49
P-1	206.90	31.66	175.24	31.35	175.55	30.84	176.06
P-2	232.92	55.34	177.58	56.50	176.42	55.23	177.69
P-3S	191.84	12.16	179.68	11.39	180.45	11.50	180.34
P-3I	191.87	14.91	176.96	14.50	177.37	13.98	177.89
P-3D	192.00	12.44	179.56	11.61	180.39	11.20	180.80
P-4S	239.15	73.02	166.13	73.16	165.99	73.32	165.83
P-4I	239.15	73.00	166.15	73.16	165.99	73.25	165.90
P-4D	239.15	63.52	175.63	63.58	175.57	64.02	175.13
P-5S	231.55	65.51	166.04	65.29	166.26	65.64	165.91
P-5D	232.23	66.41	165.82	65.91	166.32	66.23	166.00
RIVER	215.77	42.82	172.95	42.25	173.52	42.20	173.57

		Depth to	Water	Depth to	Water	Depth to	Water
	Surveyed	Water	Level	Water	Level	Water	Level
	Top of Casing	(feet)	Elevation*	(feet)	Elevation*	(feet)	Elevation*
Well	Elevation*	9/18-19/07	9/18-19/07	12/10-11/07	12/10-11/07	1/28-29/08	1/28-29/08
OW-1	292.60	69.82	222.78	69.91	222.69	69.58	223.02
OW-2	251.92	57.95	193.97	58.31	193.61	65.85	186.07
OW-3S	269.37	47.52	221.85	47.91	221.46	47.11	222.26
OW-3D	269.37	48.51	220.86	49.77	219.60	46.95	222.42
PS-1	257.71	119.56	138.15	118.64	139.07	142.16	115.55
PS-2	260.11	94.50	165.61	96.13	163.98	101.75	158.36
PS-3	249.51	32.41	217.10	31.41	218.10	33.41	216.10
PW-4	234.97	95.45	139.52	92.23	142.74	94.11	140.86
PW-5	224.11	63.20	160.91	61.64	162.47	60.16	163.95
P-1	206.90	31.15	175.75	32.59	174.31	32.05	174.85
P-2	232.92	54.42	178.50	57.83	175.09	56.58	176.34
P-3S	191.84	12.15	179.69	11.79	180.05	12.12	179.72
P-3I	191.87	18.01	173.86	14.68	177.19	14.94	176.93
P-3D	192.00	13.62	178.38	11.49	180.51	12.39	179.61
P-4S	239.15	70.05	169.10	76.44	162.71	75.25	163.90
P-4I	239.15	70.16	168.99	76.44	162.71	75.33	163.82
P-4D	239.15	64.44	174.71	66.59	172.56	67.03	172.12
P-5S	231.55	61.33	170.22	68.93	162.62	67.59	163.96
P-5D	232.23	62.71	169.52	68.63	163.60	68.11	164.12
RIVER	215.77	43.13	172.64	43.79	171.98	42.85	172.92

<sup>\*</sup> Feet above mean sea level.

NM - Not Measured.

<sup>(1)</sup> Outer well casing broken off to ground level.

Table 3 (cont.) Water Level Data for 1996 through 2012 Quarterly Sampling Baldwin Hardware Corporation, Reading, Pennsylvania

		Depth to	Water	Depth to	Water	Depth to	Water
	Surveyed	Water	Level	Water	Level	Water	Level
	Top of Casing	(feet)	Elevation*	(feet)	Elevation*	(feet)	Elevation*
Well	Elevation*	8/17-18/2009	8/17-18/2009	11/16-30/2009	11/16-30/2009	3/1-5/2010	3/1-5/2010
OW-1	292.60	67.64	224.96	66.20	226.40	53.54	239.06
OW-2	251.92	55.75	196.17	55.22	196.70	51.01	200.91
OW-3S	269.37	47.03	222.34	46.90	222.47	46.04	223.33
OW-3D	269.37	46.00	223.37	46.29	223.08	42.30	227.07
PS-1	257.71	63.65	194.06	63.75	193.96	60.21	197.50
PS-2	260.11	NM		NM		NM	
PS-3	249.51	29.86	219.65	29.94	219.57	20.64	228.87
PW-4	234.97	88.65	146.32	91.53	143.44	91.93	143.04
PW-5	224.11	61.95	162.16	61.74	162.37	54.65	169.46
P-1	206.90	32.13	174.77	31.48	175.42	22.31	184.59
P-2	232.92	56.93	175.99	56.31	176.61	47.98	184.94
P-3S	191.84	NM		NM		NM	
P-3I	191.87	NM		NM		NM	
P-3D	192.00	NM		NM		NM	
P-4S	239.15	77.60	161.55	76.98	162.17	67.60	171.55
P-4I	239.15	77.62	161.53	77.03	162.12	68.43	170.72
P-4D	239.15	NM		NM		NM	
P-5S	231.55	70.15	161.40	69.42	162.13	60.22	171.33
P-5D	232.23	71.00	161.23	70.33	161.90	61.53	170.70
RIVER	215.77	42.16	173.61	41.12	174.65	39.67	176.10

		Depth to	Water	Depth to	Water	Depth to	Water
	Surveyed	Water	Level	Water	Level	Water	Level
	Top of Casing	(feet)	Elevation*	(feet)	Elevation*	(feet)	Elevation*
Well	Elevation*	9/16-17/2011	9/16-17/2011	11/30-12/1/2011	11/30-12/1/2011	2/13/2012	2/13/2012
OW-1	292.60	54.67	237.93	51.95	240.65	52.33	240.27
OW-2	251.92	51.50	200.42	51.89	200.03	53.09	198.83
OW-3S	269.37	45.62	223.75	45.64	223.73	45.95	223.42
OW-3D	269.37	41.19	228.18	42.43	226.94	43.68	225.69
PS-1	257.71	58.53	199.18	60.27	197.44	62.65	195.06
PS-2	260.11	NM		NM		NM	
PS-3	249.51	22.14	227.37	24.58	224.93	26.88	222.63
PW-4	234.97	95.85	139.12	85.22	149.75	87.31	147.66
PW-5	224.11	48.55	175.56	51.55	172.56	56.92	167.19
P-1	206.90	24.80	182.10	28.05	178.85	29.56	177.34
P-2	232.92	50.14	182.78	51.45	181.47	53.04	179.88
P-3S	191.84	NM		NM		NM	
P-3I	191.87	NM		NM		NM	
P-3D	192.00	NM		NM		NM	
P-4S	239.15	70.98	168.17	65.76	173.39	67.19	171.96
P-4I	239.15	70.12	169.03	65.73	173.42	67.14	172.01
P-4D	239.15	NM		NM		NM	
P-5S	231.55	62.22	169.33	58.54	173.01	60.23	171.32
P-5D	232.23	63.84	168.39	59.81	172.42	61.97	170.26
RIVER	215.77	39.58	176.19	42.36	173.41	49.68	166.09

<sup>\*</sup> Feet above mean sea level.

NM - Not Measured.
(1) Outer well casing broken off to ground level.

Table 3 (cont.) Water Level Data for 1996 through 2013 Quarterly Sampling Baldwin Hardware Corporation, Reading, Pennsylvania

	_	Depth to	Water
	Surveyed	Water	Level
	Top of Casing	(feet)	Elevation*
Well	Elevation*	8/20/2013	8/20/2013
OW-1	292.60	58.86	233.74
OW-2	251.92	52.31	199.61
OW-3S	269.37	46.44	222.93
OW-3D	269.37	41.49	227.88
PS-1	257.71	NM	
PS-2	260.11	NM	
PS-3	249.51	NM	
PW-4	234.97	73.55	161.42
PW-5	224.11	55.20	168.91
P-1	206.90	32.32	174.58
P-2	232.92	57.14	175.78
P-3S	191.84	NM	
P-3I	191.87	NM	
P-3D	192.00	NM	
P-4S	239.15	76.27	162.88
P-4I	239.15	76.38	162.77
P-4D	239.15	NM	
P-5S	231.55	58.62	172.93
P-5D	232.23	69.41	162.82
RIVER	215.77	42.25	173.52

<sup>\*</sup> Feet above mean sea level.

NM - Not Measured.
(1) Outer well casing broken off to ground level.

Table 4

Monthly Treatment System Influent and Effluent TCE Concentrations for 1995 through 2013 Quarterly Sampling

Baldwin Hardware Corporation, Reading, Pennsylvania

											Tric	hloroethe	ene (µg/l)											
						19	95												1996					
Sample	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Combined Influent	340	419	417	533	403	379	343	399	345	393	224	376	530	554	625	902	623	418	495	810	629	484	556	910
Effluent	4	5	3	7	3	3	1	1	9	8	2	4	3	7	5	8	8	3	8	9	4	6	8	8
PS-1	569	988	1180	940	692	526	488	534	529	480	533	631	907	983	638	597	526	488	476	654	509	536	559	701
PS-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PW-4	1442	1699	1792	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PW-5	254	231	253	350	390	295	263	347	248	367	223	254	424	592	453	740	466	455	416	537	451	378	415	764
Blank	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	5	2	1	3	2	0	NR	2	0
Blank	NS	NS	NS	NS	NS	NS	NS	0	NS	NS	NS	NS	0	NS	1	NS	NS	0	NS	NS	NS	NR	10	NR

											Tric	hloroeth	ene (µg/l)											
						19	97												1998					
Sample	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Combined Influent	550	703	759	509	565	461	430	454	383	337	351	446	518	383	601	535	413	441	600	412	435	255	353	366
Effluent	33	15	8	23	10	16	11	32	10	4	5	2	34	22	5	5	2	9	57	10	8	3	3	2
PS-1	434	382	26	314	319	284	306	350	283	253	236	NS	434	354	327	352	237	253	309	228	268	226	216	187
PS-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PW-4	NS	NS	NS	NS	NS	674	1242	1090	948	994	1115	684	411	81	NS	NS	444	817	1217	1064	1286	1038	1021	375
PW-5	536	579	641	476	398	336	298	352	267	261	263	341	409	305	523	439	373	319	433	240	297	257	207	313
Blank	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Blank	2	NR	0	0	NR	0	0	0	NR	0	0	NR	NR	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

											Tric	hloroeth	ene (µg/l)	)										
						19	99											:	2000					
Sample	Jan	Feb	March	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Tower Influent	171	382	342	511	363	420	424	403	306	280	830	307	333	314	298	468	425	605	585	570	559	521	487	216
Tower Effluent	2	6	7	32	5	12	4	7	8	14	13	6	7	11	0	0	5	5	6	0	12	6	5	0
PS-1	240	346	374	520	338	397	293	333	355	245	348	187	160	98	39	50	63	44	46	46	54	53	200	212
PS-2	NS	NS	NS	NS	NS	325	781	854	411	369	429	324	346*	230*	341*	459*	NR	NR	NR	NR	377*	461*	324*	341*
PW-4	820	NS	NS	NS	938	NS	843	1124	894	752	1026	503	354	107	29	44	26	34	30	21	29	21	638	408
PW-5	128	336	296	500	256	416	313	368	281	163	289	182	219	262	341	445	470	521	638	554	516	658	492	153
Field Blank	0	4	0	1	1	3	1	5	NR	NR	NR	NR	0	8	0	0	0	0	0	0	0	0	0	0
Lab Blank	NR	NR	NR	NR	NR	NR	NR	4	3	0	10	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

											Tric	chloroeth	ene (µg/l)											
						20	01												2002					
Sample	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Tower Influent	520	320	232	190	410	330	279	362	319	268	238	248	254	275	234	242	240	180	180	260	305	238	158	170
Tower Effluent	5	6	<5	<5	6	6	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	8	<5	<5	<5	<5	<5
PS-1	260	280	218	282	280	321	311	269	233	229	305	283	271	517	258	209	260	190	230	290	273	209	243	331
PS-2	470*	500*	535*	379*	640*	370*	411*	402*	282*	298*	334*	299*	309*	521*	272*	433*	390*	380*	490*	520*	698*	640*	650*	572*
PW-4	1400	1100	529	879	1400	1095	370	164	42	32	83	57	54	49	59	393	370	470	680	250	250	318	812	51
PW-5	430	160	186	145	330	339	258	231	258	250	243	248	214	221	187	173	92	79	110	190	206	193	71	2145**
Blank	NR	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

# Table 4 (continued) Monthly Treatment System Influent and Effluent TCE Concentrations for 1995 through 2013 Quarterly Sampling Baldwin Hardware Corporation, Reading, Pennsylvania

											Tric	hloroeth	ene (µg/l)											
						20	03												2004					
Sample	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Tower Influent	368	277	186	314	182	143	171	210	170	152	190	310	200	190	160	160	305	178	350	190	1140	280	130	232
Tower Effluent	12	5	6	6	<5	<5	<5	5	<5	<5	6	6	220	12	<5	<5	6	15	5	<5	7	<5	<5	<5
PS-1	245	270	266	163	238	224	189	270	180	220	240	220	170	70	7	54	152	39	34	29	24	29	23	30
PS-2	438*	384*	283*	341*	240*	284*	186*	270*	190*	220*	220*	210*	200*	150*	86*	43*	30*	40*	48*	NS	NS	NS	NS	NS
PW-4	1310	1562	1320	826	556	605	488	510	480	420	420	320	210	220	100	33	17	20	22	9	32	7	10	6
PW-5	199	70	82	205	98	64	156	190	130	110	150	340	220	220	180	160	195	154	290	259	240	220	150	280
Blank	<5	<5	<5	6	<5	<6	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

											Tric	hloroeth	ene (µg/l)	)										
						20	005												2006					
Sample	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Tower Influent	180	110	80	176	110	100	2,900 (1)	2,480 (1)	80	96	61	350	50	1030	45	53	189	43	210	200	316	110	48	48
Tower Effluent	9	<5	<5	<5	<5	<5	7	<5	<5	<5	<5	16	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
PS-1	19	20	15	8	10	11	17	19	15	25	13	18	12	14	8	13	15	11	8	10	8	7	12	7
PS-2	NS	NS	12	NS	NS	NS	NS	NS	NS	NS	NS	17	27	15	14	15	16	8	8	9	9	6	9	7
PW-4	17	<5	<5	<5	23	11	16	29	77	115	27	31	14	<5	12	41	25	48	<5	14	14	13	12	<5
PW-5	120	140	120	198	130	120	149	93	70	99	64	55	50	50	52	61	46	44	51	53	44	37	38	44
Blank	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	<5	<5	<5	<5	<5	<5

												Trichlor	oethene (	(µg/l)											
							2007													2008					
Sample	Jan	Feb	March	Apr	May	June	July	July***	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec
Tower Influent	106	18	59	121	30	153	174	170	46	<5	104	100	104	46	41	96	159	<5	96	118	116	176	89	98	69
Tower Effluent	<5	<5	<5	<5	<5	<5	12	<5	<5	<5	<5	<5	9	<5	<5	<5	14	122 (2)	<5	<5	<5	5	<5	<5	<5
PS-1	6	7	10	6	<5	5	9	6	6	7	7	6	14	12	13	11	10	9	<5	<5	6	14	7	6	6
PS-2	6	6	8	7	6	<5	50	5	8	8	9	10	<5	6	2	7	8	9	<5	7	5	7	8	7	7
PW-4	<5	14	<5	<5	<5	<5	14	<5	47	54	40	22	54	25	58	58	42	<5	<5	<	34	28	8	7	6
PW-5	48	45	52	77	77	53	5	35	45	40	41	22	<5	37	49	72	42	>5	74	9	32	29	49	45	7
Blank	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

											Tric	hloroeth	ene (µg/l)											
						20	09											2	2010					
Sample	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec
Tower Influent	75	60	67	49	88	61	38	58	56	74	44	48	48	39	62	57	49	49	74	84	68	57	41	50
Tower Effluent	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
PS-1	6	<5	5	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	14	<5	<5	<5	<5	<5	<5	<5	34	<5
PS-2	7	6	<5	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	32	<5
PW-4	6	59	36	106	43	56	<5	42	<5	48	44	59	37	42	63	50	38	<5	44	82	64	<5	28	30
PW-5	48	56	36	51	44	64	110	42	68	52	54	58	42	60	64	50	40	39	42	59	50	41	36	28
Blank	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

											Tric	hloroeth	ene (µg/l)	)										
						20°	11											- 2	2012					
Sample	Jan	Feb	March	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec
Tower Influent	29	39	84	72	62	68	75	60	37	46	44	54	92	48	43	50	40	50	45	34	39	76	42	53
Tower Effluent	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
PS-1	<5	<5	<5	<5	<5	<5	<5	<5	26	<5	<5	<5	<5	<5	<5	<5	<5	<5	NS	NS	NS	NS	NS	NS
PS-2	<5	<5	<5	<5	<5	<5	<5	<5	80	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
PW-4	30	<5	50	59	74	68	<5	48	98	<5	<5	<5	<5	<5	<5	<5	<5	15	33	73	38	118	47	44
PW-5	45	47	77	60	74	<5	70	48	100	34	42	72	62	50	53	41	56	44	33	39	42	65	48	30
Blank	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

#### Table 4 (continued)

#### Monthly Treatment System Influent and Effluent TCE Concentrations for 1995 through 2013 Quarterly Sampling Baldwin Hardware Corporation, Reading, Pennsylvania

				Trichlo	roethene	e (μg/l)			
					2013				
Sample	Jan	Feb	March	Apr	May	June	July	6-Sep	9-Sep
T	-00	-		00		00	40	0.4	00
Tower Influent	36	<5	44	36	58	32	42	61	68
Tower Effluent	<5	<5	<5	<5	<5	<5	<5	<5	<5
PS-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
PS-2	<5	<5	<5	<5	<5	<5	<5	NS	<5
PW-4	30	9	<5	46	<5	<5	<5	NS	<5
PW-5	36	44	33	<5	62	35	44	NS	67
Blank	<5	<5	<5	<5	<5	<5	<5	<5	<5

μg/l - Micrograms per liter.

NR - Not Reported.

NS - Not Sampled.

< - Not detected at or above the indicated reporting limit.

\* In August 2004, Baldwin Hardware determined that the variable frequency drive for the PS-2 well pump had malfunctioned and not operated correctly for an indeterminate time. Subsequent comparison of the PS-2 flow rate and concentration data to the Tower influent flow rate and concentration data suggests that the PS-2 well pump may not have run consistently since 2000. The results for well PS-2 between January 2000 and July 2004 are flagged (\*) to note this.

- \*\* This concentration is considered anomalously high based on the combined Influent concentration.
- \*\*\* This is a confirmation sample collected on 30 July 2007. Original sample collected on 17 July 2007.
- (1) This concentration is considered anomalously high based on the individual well concentrations. Additionally, the second vial had a concentration of 80 ug/L which is more consistent with the historic TCE concentrations and the concentrations of TCE in the individual well samples.
- (2) It appears that the analytical results for the May 2008 influent/effluent results have been switched, although ERM was unable to confirm this with the laboratory.

Appendix A Laboratory Analytical Report



M.J. Reider Associates, Inc.



Attention: Dave Hancock

Sample Desc: Field Blank

Reported To: Baldwin Hardware Corporation

841 E. Wyomissing Blvd.

Reading PA 19611

Date of Report:

07/17/13

Lab ID:

761-13-0028784

Date Collected:

07/10/13 08:30

Collected By:

rxa

Date Received:

07/10/13 12:35

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
ORGANIC								
VOLATILES								
1,1-Dichloroethane	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Bromoform (Tribromomethane)	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chlorobenzene (Monochlorobenzene)	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chlorodibromomethane	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chloroform	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chloromethane (Methyl Chloride)	<10	ug/l	10	1	EPA 624	07/11	10:30	GXF
cis-1,2-Dichloroethylene	<b>&lt;</b> 5	ug/l	5	1	EPA 624	07/11	10:30	GXF
trans-1,2-Dichloroethylene	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Trichloroethylene	<b>&lt;</b> 5	ug/l	5	1	EPA 624	07/11	10:30	GXF

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Technical Director

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M.J. Reider Associates, Inc.



Attention: Dave Hancock

Sample Desc: Tower Influent

Trichloroethylene

Reported To: Baldwin Hardware Corporation

841 E. Wyomissing Blvd. Reading PA 19611 Date of Report:

07/17/13

rxa

07/11 10:30 GXF

Lab ID:

761-13-0028785

Dàte Collected:

07/10/13 08:35

Collected By:

Date Received:

EPA 624

07/10/13 12:35

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
ORGANIC								
VOLATILES								
1,1-Dichloroethane	<b>&lt;</b> 5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Bromoform (Tribromomethane)	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chlorobenzene (Monochlorobenzene)	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chlorodibromomethane	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chloroform	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chloromethane (Methyl Chloride)	<10	ug/l	10	1	EPA 624	07/11	10:30	GXF
cis-1,2-Dichloroethylene	7	ug/l	5	1	EPA 624	07/11	10:30	GXF
trans-1,2-Dichloroethylene	<b>&lt;</b> 5	ug/l	5	1	EPA 624	07/11	10:30	GXF

ug/l

42

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Technical Director

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M.J. Reider Associates, Inc.



Attention: Dave Hancock

Sample Desc: Tower Effluent

Reported To: Baldwin Hardware Corporation

841 E. Wyomissing Blvd.

Reading PA 19611

Date of Report:

07/17/13

Lab ID:

761-13-0028786

Date Collected:

07/10/13 08:40

Collected By: rxa

Date Received:

07/10/13 12:35

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
20041170								
ORGANIC								
VOLATILES								
1,1-Dichloroethane	<b>&lt;</b> 5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Bromoform (Tribromomethane)	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chlorobenzene (Monochlorobenzene)	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chlorodibromomethane	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chloroform	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chloromethane (Methyl Chloride)	<10	ug/l	10	1	EPA 624	07/11	10:30	GXF
cis-1,2-Dichloroethylene	<b>&lt;</b> 5	ug/l	5	1	EPA 624	07/11	10:30	GXF
trans-1,2-Dichloroethylene	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Trichloroethylene	<5	ug/L	5	1	EPA 624	07/11	10:30	GXF

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M.J. Reider Associates, Inc.



Attention: Dave Hancock

Sample Desc: PS-2

Reported To: Baldwin Hardware Corporation

841 E. Wyomissing Blvd.

Reading PA 19611

Date of Report:

07/17/13

Lab ID:

761-13-0028787

Date Collected:

07/10/13 08:45

Collected By:

rxa

Date Received:

07/10/13 12:35

	Result	Unit 	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
ORGANIC								
VOLATILES								
1,1-Dichloroethane	<5	ug/l	5	. 1	EPA 624	07/11	10:30	GXF
Bromoform (Tribromomethane)	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chlorobenzene (Monochlorobenzene)	<b>&lt;</b> 5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chlorodibromomethane	<b>&lt;</b> 5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chloroform	<b>&lt;</b> 5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chloromethane (Methyl Chloride)	<10	ug/l	10	1	EPA 624	07/11	10:30	GXF
cis-1,2-Dichloroethylene	<b>&lt;</b> 5	ug/L	5	1	EPA 624	07/11	10:30	GXF
trans-1,2-Dichloroethylene	<b>&lt;</b> 5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Trichloroethylene	<b>&lt;</b> 5	ug/l	5	1	EPA 624	07/11	10:30	GXF

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Technical Director

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M.J. Reider Associates, Inc.



Attention: Dave Hancock

Sample Desc: PW-4

Reported To: Baldwin Hardware Corporation

841 E. Wyomissing Blvd.

Reading PA 19611

Date of Report:

07/17/13

Lab ID:

761-13-0028788

Date Collected:

07/10/13 08:55

Collected By:

rxa

Date Received:

07/10/13 12:35

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
ORGANIC					2014 Table			
VOLATILES								
1,1-Dichloroethane	<b>&lt;</b> 5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Bromoform (Tribromomethane)	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chlorobenzene (Monochlorobenzene)	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chlorodibromomethane	<b>&lt;</b> 5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chloroform	<b>&lt;</b> 5	ug/L	5	1	EPA 624	07/11	10:30	GXF
Chloromethane (Methyl Chloride)	<10	ug/l	10	1	EPA 624	07/11	10:30	GXF
cis-1,2-Dichloroethylene	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
trans-1,2-Dichloroethylene	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Trichloroethylene	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF

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Technical Director

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M.J. Reider Associates, Inc.



Attention: Dave Hancock

Sample Desc: PW-5

Reported To: Baldwin Hardware Corporation

841 E. Wyomissing Blvd. Reading PA 19611

Date of Report:

07/17/13

Lab ID:

761-13-0028789

Date Collected:

07/10/13 09:00

Collected By:

rxa

Date Received:

07/10/13 12:35

	Result Uni		Rep	Dilutn		Test	Test	
	Result	Unit	Limit	Factor	Procedure	Date	Time	Analyst
DRGANIC								
VOLATILES								
1,1-Dichloroethane	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Bromoform (Tribromomethane)	<5	ug/L	5	1	EPA 624	07/11	10:30	GXF
Chlorobenzene (Monochlorobenzene)	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chlorodibromomethane	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chloroform	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Chloromethane (Methyl Chloride)	<10	ug/L	10	1	EPA 624	07/11	10:30	GXF
cis-1,2-Dichloroethylene	9	ug/L	5	1	EPA 624	07/11	10:30	GXF
trans-1,2-Dichloroethylene	<5	ug/l	5	1	EPA 624	07/11	10:30	GXF
Trichloroethylene	44	ug/l	5	-5	EPA 624	07/11	10:30	GXF

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Attention: Dave Hancock

Sample Desc: Field Blank

Reported To: Baldwin Hardware Corporation

841 E. Wyomissing Blvd. Reading PA 19611

Date of Report:

09/09/13

Lab ID:

761-13-0039879

Date Collected:

09/06/13 11:10

Collected By:

RXW

Date Received:

09/06/13 12:00

Jampie Desc. 1 Teta Blank					· Date Rece	riveu.	09/00	713 12:00
	Result	Unit	Rep. Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
ORGANIC								
VOLATILES								
1,1-Dichloroethane	<5	ug/L	5	1	EPA 624	09/06	14:14	TWH
Bromoform (Tribromomethane)	<5	ug/l	5	1	EPA 624	09/06	14:14	TWH
Chlorobenzene (Monochlorobenzene)	<5	ug/L	5	1	EPA 624	09/06	14:14	TWH
Chlorodibromomethane	<5	ug/l	5	1	EPA 624	09/06	14:14	TWH
Chloroform	<5	ug/l	5	1	EPA 624	09/06	14:14	TWH
Chloromethane (Methyl Chloride)	<10	ug/l	10	1	EPA 624	09/06	14:14	TWH
cis-1,2-Dichloroethylene	<5	ug/l	5	1	EPA 624	09/06	14:14	TWH
trans-1,2-Dichloroethylene	<5	ug/l	5	1	EPA 624	09/06	14:14	TWH
Trichloroethylene	<5	ug/l	5	1	EPA 624	09/06	14:14	TWH

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M.J. Reider Associates, Inc.



Attention: Dave Hancock

Sample Desc: Tower Influent

Reported To: Baldwin Hardware Corporation

841 E. Wyomissing Blvd.

Reading PA 19611

Date of Report:

09/09/13

Lab ID:

761-13-0039880

Date Collected:

09/06/13 11:26

Collected By:

RXW

Date Received:

09/06/13 12:00

							,
Result	Unit	Rep. Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/06	14:14	TWH
<5	ug/l	5	1	EPA 624	09/06	14:14	TWH
<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/06	14:14	TWH
<5	ug/l	5	1	EPA 624	09/06	14:14	TWH
<5	ug/l	5	1	EPA 624	09/06	14:14	TWH
<10	ug/l	10	1	EPA 624	09/06	14:14	TWH
10.9	ug/l	5	1	EPA 624	09/06	14:14	TWH
<5	ug/l	5	1	EPA 624	09/06	14:14	TWH
61.4	ug/l	5	1	EPA 624	09/06	14:14	TWH
	<5 <5 <5 <5 <10 10.9 <5	<pre>&lt;5      ug/l &lt;5      ug/l &lt;5      ug/l &lt;5      ug/l &lt;5      ug/l &lt;10      ug/l &lt;10      ug/l &lt;5      ug/l &lt;10      ug/l &lt;10      ug/l &lt;10      ug/l &lt;10      ug/l &lt;10.9      ug/l</pre>	Result   Unit   Limit	Result   Unit   Limit   Factor	Result Unit Limit Factor Procedure	Result   Unit   Limit   Factor   Procedure   Date	Result Unit Limit Factor Procedure Date Time

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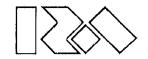
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M.J. Reider Associates, Inc.



Attention: Dave Hancock

Reported To: Baldwin Hardware Corporation

841 E. Wyomissing Blvd.

Reading PA 19611

Date of Report:

09/09/13

Lab ID:

761-13-0039881

Date Collected:

09/06/13 11:18

Collected By:

Sample Desc: Tower Effluent					· Date Rece	Date Received:		/13 12:00
	- 4.	9.1.	Rep.	Dilutn		Test	Test	
	Result	Unit	Limit	Factor	Procedure	Date	Time	Analyst
ORGANIC								
VOLATILES								
1,1-Dichloroethane	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/06	14:14	TWH
Bromoform (Tribromomethane)	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/06	14:14	TWH
Chlorobenzene (Monochlorobenzene)	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/06	14:14	TWH
Chlorodibromomethane	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/06	14:14	TWH
Chloroform	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/06	14:14	TWH
Chloromethane (Methyl Chloride)	<10	ug/l	10	1	EPA 624	09/06	14:14	TWH
cis-1,2-Dichloroethylene	<5	ug/l	5	1	EPA 624	09/06	14:14	TWH
trans-1,2-Dichloroethylene	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/06	14:14	TWH
Trichloroethylene	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/06	14:14	TWH

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M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: OW-1 Baldwin Hardware Facility

Date of Report:

09/03/13

Lab ID:

761-13-0031064

Date Collected:

08/20/13 09:35

Collected By: pgb

Date Received:

08/20/13 13:20

	Result	Unit 	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
CHEMISTRY								
COLORMETRIC								
Cyanide, Total	<.004	mg/l	.004	1	10204001x	08/22	17:21	JCL
Phenols (4AAP)	<.01	mg/L	.01	1	EPA 420.4	08/27	15:07	JCL
ION CHROMAT		٠,				,		
Chloride	4	mg/L	2	2	EPA 300.0	08/21	04:47	JAE
Sulfate	19	mg/L	2	2	EPA 300.0	08/21	04:47	JAE
OTHER		-,				,		
Total Organic Carbon	<.5	mg/L	.5	1	SM5310 C	08/26	15:44	ALD
FIELD					*	,		
PHYSICAL								
Conductivity-Field	464	umhos/cm	1	1	SM 2510B	08/20	09:35	PGB
pH-Field	7.4	su	1	1	SM4500H-B	08/20	09:35	PGB
Temperature - Field	15.0	С	.1	1	SM 2550B	08/20	09:35	PGB
INORGANIC						•		
DISSOLVED								
Barium, Dissolved	0.049	mg/l	.005	1	EPA 200.8	08/23	18:37	RLS
Cadmium, Dissolved	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Chromium, Dissolved	0.0020	mg/L	.0005	1	EPA 200.8	08/28	13:49	RLS
Copper, Dissolved	0.001	mg/L	.001	1	EPA 200.8	08/23	18:37	RLS
Iron, Dissolved	<.02	mg/L	.02	1	EPA 200.7	08/21	10:42	LNA
Lead, Dissolved	<.001	mg/L	.001	1	EPA 200.8	08/23	18:37	RLS
Manganese, Dissolved	<.001	mg/L	.001	1	EPA 200.8	08/28	13:49	RLS
Nickel, Dissolved	0.0029	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Silver, Dissolved	<.0005	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Zinc, Dissolved	0.022	mg/l	.005	1	EPA 200.8	08/28	13:49	RLS
TOTAL		-				•		
Barium, Total	0.045	mg/l	.005	1	EPA 200.8	08/23	18:37	RLS
Cadmium, Total	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Chromium, Total	0.0020	mg/L	.0005	1	EPA 200.8	08/28	13:49	RLS
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						1 "	) n .	111

Richard Wolfe Technical Director

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M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: OW-1 Baldwin Hardware Facility

Date of Report: 09/03/13

Lab ID:

761-13-0031064

Date Collected:

08/20/13 09:35

Collected By: pgb

Date Received:

08/20/13 13:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
Copper, Total	<.001	mg/L	.001	1	EPA 200.8	08/23	18:37	RLS
Iron, Total	0.04	mg/L	.02	1	EPA 200.7	08/21	10:42	LNA
Lead, Total	<.001	mg/L	.001	1	EPA 200.8	08/23	18:37	RLS
Manganese, Total	<.001	mg/L	.001	1	EPA 200.8	08/28	13:49	RLS
Nickel, Total	0.0031	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Silver, Total	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Sodium, Total	1	mg/l	.5	1	EPA 200.7	08/26	12:44	LNA
Zinc, Total	0.011	mg/L	.005	1	EPA 200.8	08/28	13:49	RLS
ORGANIC						•		
VOLATILES								
1,1,1-Trichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1,2,2-Tetrachloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1,2-Trichloroethane	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
1,1-Dichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichlorobenzene (o-Dichlorobenzene)	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichloroethane	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichloropropane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,3-Dichlorobenzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,4-Dichlorobenzene	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
2-Chloroethylvinyl Ether	<10	ug/l	10	1	SW846 8260	08/23	00:02	GXF
Benzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Bromoform (Tribromomethane)	<2	ug/l	2	1	SW846 8260	08/23	00:02	GXF
Bromomethane (Methyl Bromide)	<1	ug/L	1	1	SW846 8260	08/23	00:02	GXF
Carbon Tetrachloride	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chlorobenzene (Monochlorobenzene)	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chlorodibromomethane	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
Chloroethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Chloroform	<5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chloromethane (Methyl Chloride)	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF

Technical Director

Page 2 of 3







M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: OW-1 Baldwin Hardware Facility

Date of Report:

Date Collected:

09/03/13

Lab ID:

761-13-0031064

08/20/13 09:35

Collected By: pgb

Date Received:

08/20/13 13:20

			Rep	Dilutn		Test	Test	
	Result	Unit 	Limit 	Factor	Procedure	Date 	Time	Analyst
cis-1,2-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
cis-1,3-Dichloropropylene	<.5	ug/l	.5	1	sw846 8260	08/23	00:02	GXF
Dichlorobromomethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Dichlorodifluoromethane	<1	ug/l	1	1	sw846 8260	08/23	00:02	GXF
Ethylbenzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Methylene Chloride	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Tetrachloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Toluene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
trans-1,2-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
trans-1,3-Dichloropropylene	<.5	ug/l	.5	1	sw846 8260	08/23	00:02	GXF
Trichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Trichlorofluoromethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Vinyl Chloride	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Xylenes (Total)	<.5	ug/l	.5	1	sw846 8260	08/23	00:02	GXF

Distribution of Reports:

Reviewed and Approved by:

Richard Wolfe

Technical Director

Page 3 of 3





M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: OW-2 Baldwin Hardware Facility

Date of Report:

09/03/13

pgb

761-13-0031065

Date Collected:

Lab ID:

08/20/13 10:45

Collected By:

Date Received:

08/20/13 13:20

	Result 	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
CHEMISTRY								
COLORMETRIC								
Cyanide, Total	<.004	mg/l	.004	1	10204001X	08/22	17:21	JCL
Phenols (4AAP)	<.01	mg/l	.01	1	EPA 420.4	08/27	15:07	JCL
ION CHROMAT						·		
Chloride	37	mg/l	5	5	EPA 300.0	08/21	05:17	JAE
Sulfate	73	mg/l	5	5	EPA 300.0	08/21	05:17	JAE
OTHER						•		
Total Organic Carbon	0.8	mg/l	.5	1	sM5310 c	08/21	19:46	ALD
FIELD					•	·		
PHYSICAL								
Conductivity-Field	708	umhos/cm	1	1	SM 2510B	08/20	10:45	PGB
pH-Field	7.4	su	1	1	SM4500H-B	08/20	10:45	PGB
Temperature – Field	17.5	С	1	1	SM 2550B	08/20	10:45	PGB
INORGANIC						•		
DISSOLVED								
Barium, Dissolved	0.048	mg/l	.005	1	EPA 200.8	08/23	18:37	RLS
Cadmium, Dissolved	<.0005	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Chromium, Dissolved	0.0021	mg/l	.0005	1	EPA 200.8	08/28	13:49	RLS
Copper, Dissolved	<.001	mg/L	.001	1	EPA 200.8	08/23	18:37	RLS
Iron, Dissolved	<.02	mg/l	.02	1	EPA 200.7	08/21	10:42	LNA
Lead, Dissolved	<.001	mg/l	.001	1	EPA 200.8	08/23	18:37	RLS
Manganese, Dissolved	<.001	mg/l	.001	1	EPA 200.8	08/28	13:49	RLS
Nickel, Dissolved	0.0048	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Silver, Dissolved	<.0005	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Zinc, Dissolved	0.205	mg/l	.005	1	EPA 200.8	08/23	18:37	RLS
TOTAL								
Barium, Total	0.048	mg/l	.005	1	EPA 200.8	08/23	18:37	RLS
Cadmium, Total	<.0005	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Chromium, Total	0.0023	mg/L	.0005	1	EPA 200.8	08/28	13:49	RLS
Distribution of Reports:					Reviewed a	nd Appro		111

Richard Wolfe Technical Director

Page 1 of 3







M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: OW-2 Baldwin Hardware Facility

Date of Report: 09/03/13

Lab ID:

761-13-0031065

Date Collected:

08/20/13 10:45

Collected By: pgb

Date Received: 08/20/13 13:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
Copper, Total	<.001	mg/l	.001	1	EPA 200.8	08/23	 18:37	RLS
Iron, Total	0.02	mg/L	.02	1	EPA 200.7	08/21	10:42	LNA
Lead, Total	<.001	mg/L	.001	1	EPA 200.8	08/23	18:37	RLS
Manganese, Total	<.001	mg/l	.001	1	EPA 200.8	08/28	13:49	RLS
Nickel, Total	0.0050	mg∕L	.0005	1	EPA 200.8	08/23	18:37	RLS
Silver, Total	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Sodium, Total	27.1	mg/L	.5	1	EPA 200.7	08/26	12:44	LNA
Zinc, Total	0.212	mg/L	.005	1	EPA 200.8	08/23	18:37	RLS
ORGANIC						•		
VOLATILES					•			
1,1,1-Trichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1,2,2-Tetrachloroethane	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
1,1,2-Trichloroethane	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
1,1-Dichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichlorobenzene (o-Dichlorobenzene)	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichloropropane	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
1,3-Dichlorobenzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,4-Dichlorobenzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
2-Chloroethylvinyl Ether	<10	ug/l	10	1	SW846 8260	08/23	00:02	GXF
Benzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Bromoform (Tribromomethane)	<2	ug/l	2	1	SW846 8260	08/23	00:02	GXF
Bromomethane (Methyl Bromide)	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Carbon Tetrachloride	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chlorobenzene (Monochlorobenzene)	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chlorodibromomethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chloroethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Chloroform	<5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
Chloromethane (Methyl Chloride)	<1	ug/L	1	1	SW846 8260	08/23	00:02	GXF
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Richard Wolfe Technical Director

Page 2 of 3







M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: OW-2 Baldwin Hardware Facility

Date of Report:

09/03/13

Lab ID:

761-13-0031065

Date Collected:

08/20/13 10:45

Collected By: pgb

Date Received:

08/20/13 13:20

	David 6	110.54	Rep	Dilutn		Test	Test	
	Result	Unit	Limit 	Factor	Procedure	Date	Time	Analyst
cis-1,2-Dichloroethylene	3.6	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
cis-1,3-Dichloropropylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Dichlorobromomethane	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
Dichlorodifluoromethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Ethylbenzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Methylene Chloride	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
Tetrachloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Toluene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
trans-1,2-Dichloroethylene	<.5	ug/L	.5	1	sw846 8260	08/23	00:02	GXF
trans-1,3-Dichloropropylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Trichloroethylene	4.4	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Trichlorofluoromethane	<1	ug/L	1	1	sw846 8260	08/23	00:02	GXF
Vinyl Chloride	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Xylenes (Total)	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF

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Reviewed and Approved by:

Richard Wolfe

Technical Director

Page 3 of 3







M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: OW-3S Baldwin Hardware Facility

Date of Report:

09/03/13

Lab ID:

761-13-0031066

Date Collected:

08/20/13 08:30

Collected By: pgb

Date Received:

08/20/13 13:20

	Result	Unit 	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
CHEMISTRY								
COLORMETRIC								
Cyanide, Total	< .004	mg/l	.004	1	10204001x	08/22	17:21	JCL
Phenols (4AAP)	<.01	mg/L	.01	1	EPA 420.4	08/28	15:58	JCL
ION CHROMAT		-,				,		
Chloride	90	mg/L	10	10	EPA 300.0	08/21	05:47	JAE
Sulfate	40	mg/L	10	10	EPA 300.0	08/21	05:47	JAE
OTHER		-,				,		
Total Organic Carbon	0.6	mg/L	.5	1	sm5310 c	08/21	19:46	ALD
FIELD		-,				,		
PHYSICAL								
Conductivity-Field	875	umhos/cm	1	1	SM 2510B	08/20	08:30	PGB
pH-Field	6.5	su .	1	1	SM4500H-B	08/20	08:30	PGB
Temperature - Field	15.7	С	.1	1	SM 2550B	08/20	08:30	PGB
INORGANIC						,		
DISSOLVED								
Barium, Dissolved	0.154	mg/L	.005	1	EPA 200.8	08/23	18:37	RLS
Cadmium, Dissolved	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	
Chromium, Dissolved	0.0032	mg/L	.0005	1	EPA 200.8	08/28	13:49	
Copper, Dissolved	<.001	mg/L	.001	1	EPA 200.8	08/23	18:37	RLS
Iron, Dissolved	<.02	mg/L	.02	1	EPA 200.7	08/21	10:42	LNA
Lead, Dissolved	<.001	mg/l	.001	1	EPA 200.8	08/23	18:37	RLS
Manganese, Dissolved	0.005	mg/L	.001	1	EPA 200.8	08/28	13:49	RLS
Nickel, Dissolved	0.0651	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Silver, Dissolved	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Zinc, Dissolved	<.005	mg/l	.005	1	EPA 200.8	08/23	18:37	RLS
TOTAL						,		
Barium, Total	0.186	mg/L	.005	1	EPA 200.8	08/23	18:37	RLS
Cadmium, Total	<0005	mg/l	.0005	1	EPA 200.8	08/23	18:37	
Chromium, Total	1.95	mg/L	.0005	1	EPA 200.8	08/28		
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Technical Director

Page 1 of 3







M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: OW-3S Baldwin Hardware Facility

Date of Report: 09/03/13

Lab ID:

761-13-0031066

Date Collected:

08/20/13 08:30

Collected By: pgb

Date Received:

08/20/13 13:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
Copper, Total	0.034	mg/l	.001	1	EPA 200.8	08/23	18:37	RLS
Iron, Total	9.47	mg/l	.02	1	EPA 200.7	08/21	10:42	LNA
Lead, Total	<.001	mg/l	.001	1	EPA 200.8	08/23	18:37	RLS
Manganese, Total	0.231	mg/l	.001	1	EPA 200.8	08/28	13:49	RLS
Nickel, Total	0.166	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Silver, Total	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Sodium, Total	37.3	mg/L	.5	1	EPA 200.7	08/26	12:44	LNA
Zinc, Total	0.005	mg/l	.005	1	EPA 200.8	08/23	18:37	RLS
ORGANIC								
VOLATILES					,			
1,1,1-Trichloroethane	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
1,1,2,2-Tetrachloroethane	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
1,1,2-Trichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1-Dichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichlorobenzene (o-Dichlorobenzene)	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichloropropane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,3-Dichlorobenzene	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
1,4-Dichlorobenzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
2-Chloroethylvinyl Ether	<10	ug/L	10	1	SW846 8260	08/23	00:02	GXF
Benzene	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
Bromoform (Tribromomethane)	<2	ug/l	2	1	SW846 8260	08/23	00:02	GXF
Bromomethane (Methyl Bromide)	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Carbon Tetrachloride	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chlorobenzene (Monochlorobenzene)	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chlorodibromomethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chloroethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Chloroform	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chloromethane (Methyl Chloride)	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Distribution of Reports:					Reviewed a	nd Appro	oved by	1.1

Richard Wolfe Technical Director

Page 2 of 3







M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: OW-3S Baldwin Hardware Facility

Date of Report:

09/03/13

Lab ID:

761-13-0031066

Date Collected:

08/20/13 08:30

Collected By:

pgb

Date Received:

08/20/13 13:20

	De sul te	16. 24	Rep	Dilutn		Test	Test	
	Result	Unit	Limit	Factor	Procedure	Date	Time	Analyst
cis-1,2-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
cis-1,3-Dichloropropylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Dichlorobromomethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Dichlorodifluoromethane	<1	ug/l	1	1	sw846 8260	08/23	00:02	GXF
Ethylbenzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Methylene Chloride	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Tetrachloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Toluene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
trans-1,2-Dichloroethylene	<.5	ug/l	.5	1	sw846 8260	08/23	00:02	GXF
trans-1,3-Dichloropropylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Trichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Trichlorofluoromethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Vinyl Chloride	<1	ug/L	1	1	SW846 8260	08/23	00:02	GXF
Xylenes (Total)	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF

#### COMMENTS

O1 The sample vial was checked for residual chlorine after the sw846 8260 procedure. The sample tested positive for residual chlorine.

Distribution of Reports:

Reviewed and Approved by

Richard Wolfe

Technical Director

Page 3 of 3

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NELAC accreditations for various drinking water, wastewater and solid & chemical materials analytes.







M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: OW-3D Baldwin Hardware Facility

Date of Report:

09/03/13

761-13-0031067

Date Collected:

Lab ID:

08/20/13 09:10

Collected By: pgb

Date Received:

08/20/13 13:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
CHEMISTRY								
COLORMETRIC								
Cyanide, Total	<.004	mg/l	.004	1	10204001x	08/22	17:21	JCL
Phenols (4AAP)	<.01	mg/L	.01	1	EPA 420.4	08/28		JCL
ION CHROMAT						•		
Chloride	7	mg/l	2	2	EPA 300.0	08/21	06:17	JAE
Sulfate	31	mg/l	2	2	EPA 300.0	08/21	06:17	JAE
OTHER						•		
Total Organic Carbon	0.6	mg/L	.5	1	SM5310 C	08/21	19:46	ALD
FIELD					•	·		
PHYSICAL								
Conductivity-Field	501	umhos/cm	1	1	SM 2510B	08/20	09:10	PGB
pH-Field	7.4	su	1	1	SM4500H-B	08/20	09:10	PGB
Temperature - Field	14.6	С	.1	1	SM 2550B	08/20	09:10	PGB
INORGANIC								
DISSOLVED								
Barium, Dissolved	0.120	mg/l	.005	1	EPA 200.8	08/23	18:37	RLS
Cadmium, Dissolved	<.0005	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Chromium, Dissolved	0.0015	mg/l	.0005	1	EPA 200.8	08/28	13:49	RLS
Copper, Dissolved	<.001	mg/L	.001	1	EPA 200.8	08/23	18:37	RLS
Iron, Dissolved	0.12	mg/l	.02	1	EPA 200.7	08/21	10:42	LNA
Lead, Dissolved	<.001	mg/l	.001	1	EPA 200.8	08/23	18:37	RLS
Manganese, Dissolved	0.005	mg/L	.001	1	EPA 200.8	08/28	13:49	RLS
Nickel, Dissolved	0.0034	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Silver, Dissolved	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Zinc, Dissolved	<.005	mg/l	.005	1	EPA 200.8	08/23	18:37	RLS
TOTAL								
Barium, Total	0.113	mg/L	.005	1	EPA 200.8	08/23	18:37	RLS
Cadmium, Total	<.0005	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Chromium, Total	0.0037	mg/L	.0005	1	EPA 200.8	08/28	13:49	RLS
Distribution of Reports:					Reviewed a	AL .	oved by:	11

Richard Wolfe Technical Director

Page 1 of 3







M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: OW-3D Baldwin Hardware Facility

Date of Report: 09/03/13

Lab ID:

761-13-0031067

Date Collected:

08/20/13 09:10

Collected By: pgb

Date Received:

08/20/13 13:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
Copper, Total	<.001	mg/l	.001	1	EPA 200.8	08/23	18:37	RLS
Iron, Total	0.13	mg/L	.02	1	EPA 200.7	08/21	10:42	LNA
Lead, Total	<.001	mg/L	.001	1	EPA 200.8	08/23	18:37	RLS
Manganese, Total	0.005	mg/l	.001	1	EPA 200.8	08/28	13:49	RLS
Nickel, Total	0.0029	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Silver, Total	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Sodium, Total	1.3	mg/L	.5	1	EPA 200.7	08/26	12:44	LNA
Zinc, Total	<.005	mg/l	.005	1	EPA 200.8	08/23	18:37	RLS
ANIC		-,				•		
OLATILES								
1,1,1-Trichloroethane	<.5	ug/l	.5	1	sw846 8260	08/23	00:02	GXF
1,1,2,2-Tetrachloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1,2-Trichloroethane	<.5	ug/l	.5	1	sw846 8260	08/23	00:02	GXF
1,1-Dichloroethane	<.5	ug/l	.5	1	sw846 8260	08/23	00:02	GXF
1,1-Dichloroethylene	<.5	ug/l	.5	1	sw846 8260	08/23	00:02	GXF
1,2-Dichlorobenzene (o-Dichlorobenzene)	<.5	ug/L	.5	1	sw846 8260	08/23	00:02	GXF
1,2-Dichloroethane	1.7	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichloropropane	<.5	ug/l	.5	1	sw846 8260	08/23	00:02	GXF
1,3-Dichlorobenzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,4-Dichlorobenzene	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
2-Chloroethylvinyl Ether	<10	ug/l	10	1	SW846 8260	08/23	00:02	GXF
Benzene	39.4	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Bromoform (Tribromomethane)	<2	ug/l	2	1	sw846 8260	08/23	00:02	GXF
Bromomethane (Methyl Bromide)	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Carbon Tetrachloride	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chlorobenzene (Monochlorobenzene)	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chlorodibromomethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chloroethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Chloroform	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chloromethane (Methyl Chloride)	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF

Richard Wolfe
Technical Director

Page 2 of 3





M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: OW-3D Baldwin Hardware Facility

Date of Report:

09/03/13

Lab ID:

761-13-0031067

Date Collected:

08/20/13 09:10

Collected By: pgb

Date Received:

08/20/13 13:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
cis-1,2-Dichloroethylene	<.5	ug/l	.5	1	sw846 8260	08/23	00:02	GXF
cis-1,3-Dichloropropylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Dichlorobromomethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Dichlorodifluoromethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Ethylbenzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Methylene Chloride	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Tetrachloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Toluene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
trans-1,2-Dichloroethylene	<.5	ug/l	.5	1	sw846 8260	08/23	00:02	GXF
trans-1,3-Dichloropropylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Trichloroethylene	<.5	ug/l	.5	1	sw846 8260	08/23	00:02	GXF
Trichlorofluoromethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Vinyl Chloride	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Xylenes (Total)	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF

Distribution of Reports:

Reviewed and Approved by:

Richard Wolfe

Technical Director

Page 3 of 3







M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: PS-2 Baldwin Hardware Facility

Date of Report: 09/03/13

Lab ID:

761-13-0031068

Date Collected:

08/20/13 11:35

Collected By: pgb

Date Received:

08/20/13 13:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
CHEMICATOV								
CHEMISTRY								
COLORMETRIC	4.004		00/	4	400040041	00/00	47 04	
Cyanide, Total	<.004	mg/l	.004	1	10204001X	,	17:21	JCL
Phenols (4AAP)	<.01	mg/l	.01	1	EPA 420.4	08/28	15:58	JCL
ION CHROMAT	7/	11		_	700 0	00/04	04 47	
Chloride	34	mg/L	5	5	EPA 300.0	08/21	06:47	
Sulfate	60	mg/l	5	5	EPA 300.0	08/21	06:47	JAE
OTHER			_	_				
Total Organic Carbon	0.8	mg/l	.5	1	SM5310 C	08/21	19:46	ALD
FIELD								
PHYSICAL								
Conductivity-Field	722	umhos/cm	1	1	SM 2510B	08/20	11:35	PGB
pH-Field	7.1	su	1	1	SM4500H-B	08/20	11:35	PGB
Temperature - Field	17.2	С	.1	1	SM 2550B	08/20	11:35	PGB
INORGANIC								
DISSOLVED								
Barium, Dissolved	0.054	mg/l	.005	1	EPA 200.8	08/23	18:37	RLS
Cadmium, Dissolved	<.0005	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Chromium, Dissolved	0.0058	mg/l	.0005	1	EPA 200.8	08/28	22:27	RLS
Copper, Dissolved	0.003	mg/l	.001	1	EPA 200.8	08/23	18:37	RLS
Iron, Dissolved	<.02	mg/l	.02	1	EPA 200.7	08/21	10:42	LNA
Lead, Dissolved	<.001	mg/l	.001	1	EPA 200.8	08/23	18:37	RL\$
Manganese, Dissolved	<.001	mg/l	.001	1	EPA 200.8	08/28	22:27	RLS
Nickel, Dissolved	0.0042	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Silver, Dissolved	<.0005	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Zinc, Dissolved	0.008	mg/L	.005	1	EPA 200.8	08/28	22:27	RLS
TOTAL						•		
Barium, Total	0.055	mg/L	.005	1	EPA 200.8	08/23	18:37	RLS
Cadmium, Total	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Chromium, Total	0.0056	mg/L	.0005	1	EPA 200.8	08/28		RLS
Distribution of Reports:		-,			Reviewed a	•		
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Richard Wolfe Technical Director

Page 1 of 3





M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: PS-2 Baldwin Hardware Facility

Date of Report:

09/03/13

Lab ID:

761-13-0031068

Date Collected:

08/20/13 11:35

Collected By: pgb

Date Received:

08/20/13 13:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
Copper, Total	0.004	 mg/l	.001	1	EPA 200.8	08/23	18:37	RLS
Iron, Total	<.02	mg/L	.02	1	EPA 200.7	08/21	10:42	LNA
Lead, Total	0.001	mg/l	.001	1	EPA 200.8	08/23	18:37	RLS
Manganese, Total	0.002	mg/L	.001	1	EPA 200.8	08/28	22:27	RLS
Nickel, Total	0.0054	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Silver, Total	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Sodium, Total	10.9	mg/L	.5	1	EPA 200.7	08/26	12:44	LNA
Zinc, Total	0.013	mg/l	.005	1	EPA 200.8	08/28	22:27	RLS
ORGANIC						,		
VOLATILES								
1,1,1-Trichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1,2,2-Tetrachloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1,2-Trichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1-Dichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichlorobenzene (o-Dichlorobenzene)	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichloropropane	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
1,3-Dichlorobenzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,4-Dichlorobenzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
2-Chloroethylvinyl Ether	<10	ug/l	10	1	SW846 8260	08/23	00:02	GXF
Benzene	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
Bromoform (Tribromomethane)	<2	ug/L	2	1	SW846 8260	08/23	00:02	GXF
Bromomethane (Methyl Bromide)	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Carbon Tetrachloride	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chlorobenzene (Monochlorobenzene)	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chlorodibromomethane	<.5	ug/L	.5	1	sw846 8260	08/23	00:02	GXF
Chloroethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Chloroform	16	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chloromethane (Methyl Chloride)	<1	ug/l	1	1	SW846 8260	,	00:02	GXF
Distribution of Reports:		•			Reviewed ar			

Richard Wolfe Technical Director

Page 2 of 3







M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: PS-2 Baldwin Hardware Facility

Date of Report:

09/03/13

Lab ID:

761-13-0031068

Date Collected:

08/20/13 11:35

Collected By: pgb

Date Received:

08/20/13 13:20

			Rep	Dilutn		Test	Test	
	Result	Unit	Limit	Factor	Procedure	Date	Time	Analyst
cis-1,2-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
cis-1,3-Dichloropropylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Dichlorobromomethane	<.5	ug/l	.5	1	sw846 8260	08/23	00:02	GXF
Dichlorodifluoromethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Ethylbenzene	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
Methylene Chloride	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Tetrachloroethylene	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
Toluene	<.5	ug/l	.5	1	sw846 8260	08/23	00:02	GXF
trans-1,2-Dichloroethylene	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
trans-1,3-Dichloropropylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Trichloroethylene	0.6	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Trichlorofluoromethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Vinyl Chloride	<1	ug/L	1	1	SW846 8260	08/23	00:02	GXF
Xylenes (Total)	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF

Distribution of Reports:

Richard Wolfe

Technical Director

Page 3 of 3





M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Sample Desc: PS-3 Baldwin Hardware Facility - no sample

Suite 400

Annapolis MD 21401

Date of Report:

09/03/13

Lab ID:

761-13-0031069

Date Collected:

08/20/13 13:00

Collected By:

..., ....,

corrected b

pgb

Date Received:

08/20/13 13:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
CHEMISTRY OTHER No Sample	<1	None	1	1	NO SAMPLE	08/20	13.00	PGR

Distribution of Reports:

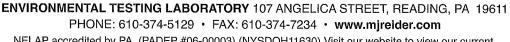
Reviewed and Approved by:

Richard Wolfe

Technical Director

Page 1 of 1









M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: PW-4 Baldwin Hardware Facility

Date of Report:

09/03/13

Lab ID:

761-13-0031070

Date Collected:

08/20/13 12:15

Collected By: pgb

Date Received:

08/20/13 13:20

	Result	Unit 	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
CHEMISTRY								
COLORMETRIC								
Cyanide, Total	<.004	mg/l	.004	1	10204001x	08/22	17:21	JCL
Phenols (4AAP)	<.01	mg/l	.01	1	EPA 420.4	•	15:58	JCL
ION CHROMAT		o,				,		
Chloride	94	mg/l	5	5	EPA 300.0	08/21	07:17	JAE
Sulfate	66	mg/L	5	5	EPA 300.0	08/21	07:17	JAE
OTHER		-,				,		
Total Organic Carbon	0.7	mg/l	.5	1	SM5310 C	08/21	19:46	ALD
FIELD		٠,				,		
PHYSICAL.								
Conductivity-Field	969	umhos/cm	1	1	SM 2510B	08/20	12:15	PGB
pH-Field	6.6	su	1	1	SM4500H-B	08/20	12:15	PGB
Temperature - Field	16.5	С	.1	1	SM 2550B	08/20	12:15	PGB
INORGANIC						•		
DISSOLVED								
Barium, Dissolved	0.110	mg/l	.005	1	EPA 200.8	08/23	18:37	RLS
Cadmium, Dissolved	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Chromium, Dissolved	0.0054	mg/L	.0005	1	EPA 200.8	08/28	22:27	RLS
Copper, Dissolved	0.002	mg/l	.001	1	EPA 200.8	08/23	18:37	RLS
Iron, Dissolved	<.02	mg/L	.02	1	EPA 200.7	08/21	10:42	LNA
Lead, Dissolved	<.001	mg/L	.001	1	EPA 200.8	08/23	18:37	RLS
Manganese, Dissolved	<.001	mg/l	.001	1	EPA 200.8	08/28	22:27	RLS
Nickel, Dissolved	0.0054	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Silver, Dissolved	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Zinc, Dissolved	0.009	mg/L	.005	1	EPA 200.8	08/28	22:27	RLS
TOTAL						·		
Barium, Total	0.108	mg/l	. 005	1	EPA 200.8	08/23	18:37	RLS
Cadmium, Total	<0005	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Chromium, Total	0.0053	mg/L	.0005	1	EPA 200.8	08/28	22:27	RLS
Distribution of Reports:					Reviewed a	nd Appro	oved by	11

Richard Wolfe Technical Director

Page 1 of 3







M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: PW-4 Baldwin Hardware Facility

Date of Report:

09/03/13

Lab ID:

761-13-0031070

Date Collected:

08/20/13 12:15

Collected By: pgb

Date Received:

08/20/13 13:20

	Result	Unit 	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
Copper, Total	0.002	mg/L	.001	1	EPA 200.8	08/23	18:37	RLS
Iron, Total	<.02	mg/L	.02	1	EPA 200.7	08/21	10:42	LNA
Lead, Total	<.001	mg/l	.001	1	EPA 200.8	08/23	18:37	RLS
Manganese, Total	<.001	mg/L	.001	1	EPA 200.8	08/28	22:27	RLS
Nickel, Total	0.0051	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Silver, Total	<.0005	mg/L	.0005	1	EPA 200,8	08/23	18:37	RLS
Sodium, Total	43.5	mg/l	.5	1	EPA 200.7	08/26	12:44	LNA
Zinc, Total	0.008	mg/l	.005	1	EPA 200.8	08/28	22:27	RLS
ORGANIC						•		
VOLATILES								
1,1,1-Trichloroethane	2.2	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
1,1,2,2-Tetrachloroethane	<.5	ug/L	.5	1	SW846 8260	08/20	23:13	GXF
1,1,2-Trichloroethane	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
1,1-Dichloroethane	0.6	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
1,1-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
1,2-Dichlorobenzene (o-Dichlorobenzene)	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
1,2-Dichloroethane	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
1,2-Dichloropropane	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
1,3-Dichlorobenzene	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
1,4-Dichlorobenzene	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
2-Chloroethylvinyl Ether	<10	ug/l	10	1	SW846 8260	08/20	23:13	GXF
Benzene	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
Bromoform (Tribromomethane)	<2	ug/L	2	1	SW846 8260	08/20	23:13	GXF
Bromomethane (Methyl Bromide)	<1	ug/l	1	1	SW846 8260	08/20	23:13	GXF
Carbon Tetrachloride	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
Chlorobenzene (Monochlorobenzene)	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
Chlorodibromomethane	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
Chloroethane	<1	ug/l	1	1	SW846 8260	08/20	23:13	GXF
Chloroform	<.5	ug/L	.5	1	SW846 8260	08/20	23:13	GXF
Chloromethane (Methyl Chloride)	<1	ug/l	1	1	SW846 8260	08/20	23:13	GXF
Distribution of Reports:					Reviewed ar	nd Appro	oved by	101

Richard Wolfe Technical Director

Page 2 of 3







M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: PW-4 Baldwin Hardware Facility

Date of Report:

Lab ID:

09/03/13 761-13-0031070

\_\_\_\_\_

Date Collected:

08/20/13 12:15

Collected By: pgb

Date Received:

08/20/13 13:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyat
	Nesqet							Analyst
cis-1,2-Dichloroethylene	1.3	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
cis-1,3-Dichloropropylene	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
Dichlorobromomethane	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
Dichlorodifluoromethane	<1	ug/l	1	1	SW846 8260	08/20	23:13	GXF
Ethylbenzene	<.5	ug/L	.5	1	SW846 8260	08/20	23:13	GXF
Methylene Chloride	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
Tetrachloroethylene	0.6	ug/L	.5	1	SW846 8260	08/20	23:13	GXF
Toluene	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
trans-1,2-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
trans-1,3-Dichloropropylene	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
Trichloroethylene	1.2	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
Trichlorofluoromethane	<1	ug/l	1	1	SW846 8260	08/20	23:13	GXF
Vinyl Chloride	<1	ug/L	1	1	SW846 8260	08/20	23:13	GXF
Xylenes (Total)	<.5	ug/L	.5	1	SW846 8260	08/20	23:13	GXF

Distribution of Reports:

Reviewed and Approved by:

Richard Wolfe

Technical Director

Page 3 of 3





M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: PW-5 Baldwin Hardware Facility

Date of Report: 09/03/13

Lab ID:

761-13-0031071

Date Collected:

08/20/13 11:55

Collected By: pgb

Date Received:

08/20/13 13:20

	Result	Unit 	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
CHEMISTRY								
COLORMETRIC								
Cyanide, Total	<.004	mg/L	.004	1	10204001x	08/22	17:21	JCL
Phenols (4AAP)	<.01	mg/L	.01	1	EPA 420.4	08/28	15:58	JCL
ION CHROMAT						•		
Chloride	66	mg/L	5	5	EPA 300.0	08/21	07:47	JAE
Sulfate	44	mg/L	5	5	EPA 300.0	08/21	07:47	JAE
OTHER		·				•		
Total Organic Carbon	<.5	mg/l	.5	1	sm5310 c	08/21	19:46	ALD
FIELD						•		
PHYSICAL								
Conductivity-Field	822	umhos/cm	1	1	SM 2510B	08/20	11:55	PGB
pH-Field	7.6	su	1	1	SM4500H-B	08/20	11:55	PGB
Temperature - Field	16.4	С	.1	1	SM 2550B	08/20	11:55	PGB
INORGANIC						•		
DISSOLVED								
Barium, Dissolved	0.120	mg/l	.005	1	EPA 200.8	08/23	18:37	RLS
Cadmium, Dissolved	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Chromium, Dissolved	0.0027	mg/L	.0005	1	EPA 200.8	08/28	22:27	RLS
Copper, Dissolved	0.001	mg/L	.001	1	EPA 200.8	08/23	18:37	RLS
Iron, Dissolved	<.02	mg/L	.02	1	EPA 200.7	08/21	10:42	LNA
Lead, Dissolved	<.001	mg/l	.001	1	EPA 200.8	08/23	18:37	RLS
Manganese, Dissolved	<.001	mg/L	.001	1	EPA 200.8	08/28	22:27	RLS
Nickel, Dissolved	0.0056	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Silver, Dissolved	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Zinc, Dissolved	0.012	mg/l	.005	1	EPA 200.8	08/28	22:27	RLS
TOTAL						•		
Barium, Total	0.124	mg/l	.005	1	EPA 200.8	08/23	18:37	RLS
Cadmium, Total	<0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Chromium, Total	0.0023	mg/L	.0005	1	EPA 200.8	•	22:27	
Distribution of Reports:					Reviewed a	nd Appro	oved by:	

Richard Wolfe Technical Director

Page 1 of 3







M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: PW-5 Baldwin Hardware Facility

Date of Report: 09/03/13

Lab ID:

761-13-0031071

Date Collected:

08/20/13 11:55

Collected By: pgb

Date Received: 08/

08/20/13 13:20

	Result	Unit 	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
Copper, Total	<.001	mg/L	.001	1	EPA 200.8	08/23	18:37	RLS
Iron, Total	<.02	mg/L	.02	1	EPA 200.7	08/21	10:42	LNA
Lead, Total	<.001	mg/L	.001	1	EPA 200.8	08/23	18:37	RLS
Manganese, Total	0.003	mg/L	.001	1	EPA 200.8	08/28	22:27	RLS
Nickel, Total	0.0054	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Silver, Total	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Sodium, Total	30.3	mg/L	.5	1	EPA 200.7	08/26	12:44	LNA
Zinc, Total	0.013	mg/L	.005	1	EPA 200.8	08/28	22:27	RLS
ORGANIC						,		
VOLATILES								
1,1,1-Trichloroethane	1.2	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
1,1,2,2-Tetrachloroethane	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
1,1,2-Trichloroethane	<.5	ug/L	.5	1	SW846 8260	•	23:13	GXF
1,1-Dichloroethane	<.5	ug/L	.5	1	SW846 8260	08/20	23:13	GXF
1,1-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
1,2-Dichlorobenzene (o-Dichlorobenzene)	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
1,2-Dichloroethane	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
1,2-Dichloropropane	<.5	ug/L	.5	1	SW846 8260	08/20	23:13	GXF
1,3-Dichlorobenzene	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
1,4-Dichlorobenzene	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
2-Chloroethylvinyl Ether	<10	ug/l	10	1	SW846 8260	08/20	23:13	GXF
Benzene	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
Bromoform (Tribromomethane)	<2	ug/L	2	1	SW846 8260	08/20	23:13	GXF
Bromomethane (Methyl Bromide)	<1	ug/l	1	1	SW846 8260	08/20	23:13	GXF
Carbon Tetrachloride	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
Chlorobenzene (Monochlorobenzene)	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
Chlorodibromomethane	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
Chloroethane	<1	ug/l	1	1	SW846 8260	08/20	23:13	GXF
Chloroform	<.5	ug/l	.5	1	SW846 8260	•	23:13	GXF
Chloromethane (Methyl Chloride)	<1	ug/l	1	1	SW846 8260		23:13	GXF
Distribution of Reports:					Reviewed an	nd Appro	ved by:	1 1

Richard Wolfe Technical Director

Page 2 of 3







M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Sample Desc: PW-5 Baldwin Hardware Facility

Date of Report: 09/03/13

Lab ID:

Date Collected:

761-13-0031071

Collected By:

08/20/13 11:55

pgb

Date Received:

08/20/13 13:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyat
	Nesutt						111111111111111111111111111111111111111	Analyst
cis-1,2-Dichloroethylene	7.4	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
cis-1,3-Dichloropropylene	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
Dichlorobromomethane	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
Dichlorodifluoromethane	<1	ug/l	1.	1	SW846 8260	08/20	23:13	GXF
Ethylbenzene	<b>&lt;.</b> 5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
Methylene Chloride	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
Tetrachloroethylene	1.8	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
Toluene	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
trans-1,2-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
trans-1,3-Dichloropropylene	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF
Trichloroethylene	45	ug/l	2.5	5	SW846 8260	08/21	09:07	GXF
Trichlorofluoromethane	<1	ug/l	1	1	SW846 8260	08/20	23:13	GXF
Vinyl Chloride	<1	ug/l	1	1	SW846 8260	08/20	23:13	GXF
Xylenes (Total)	<.5	ug/l	.5	1	SW846 8260	08/20	23:13	GXF

Distribution of Reports:

Reviewed and Approved by:

Richard Wolfe

Technical Director

Page 3 of 3





M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Sample Desc: Duplicate @ Well OW-2 Baldwin Hardware Facility

Suite 400

Annapolis MD 21401

Date of Report: 09/03/13

Lab ID:

761-13-0031072

08/20/13 10:55

Collected By: pgb

Date Received:

Date Collected:

08/20/13 13:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
CHEMISTRY					سے بھی ہیں ہیں ہیں سے نہیں انہا آئند جو			
COLORMETRIC								
Cyanide, Total	<004	mg/l	.004	1	10204001x	08/22	17:21	JCL
Phenols (4AAP)	<.01	mg/l	.01	1	EPA 420.4	08/28	15:58	JCL
ION CHROMAT		σ,				,		
Chloride	37	mg/l	5	5	EPA 300.0	08/21	08:18	JAE
Sulfate	72	mg/l	5	5	EPA 300.0	08/21	08:18	JAE
OTHER		•				,		
Total Organic Carbon	0.5	mg/L	.5	1	SM5310 C	08/21	19:46	ALD
FIELD		σ,			٠	,		
PHYSICAL								
Conductivity-Field	708	umhos/cm	1	1	SM 2510B	08/20	10:55	PGB <sup>1</sup>
pH-Field	7.4	su	1	1	SM4500H-B	08/20	10:55	PGB
Temperature - Field	17.5	С	.1	1	SM 2550B	08/20	10:55	PGB
INORGANIC						,		
DISSOLVED								
Barium, Dissolved	0.044	mg/l	.005	1	EPA 200.8	08/23	18:37	RLS
Cadmium, Dissolved	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Chromium, Dissolved	0.0023	mg/L	.0005	1	EPA 200.8	08/28	22:27	RLS
Copper, Dissolved	<.001	mg/L	.001	1	EPA 200.8	08/23	18:37	RLS
Iron, Dissolved	<.02	mg/L	.02	1	EPA 200.7	08/21	10:42	LNA
Lead, Dissolved	<.001	mg/l	.001	1	EPA 200.8	08/23	18:37	RLS
Manganese, Dissolved	<.001	mg/L	.001	1	EPA 200.8	08/28	22:27	RLS
Nickel, Dissolved	0.0051	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Silver, Dissolved	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Zinc, Dissolved	0.214	mg/L	.005	1	EPA 200.8	08/28	22:27	RLS
TOTAL						•		
Barium, Total	0.047	mg/l	.005	1	EPA 200.8	08/23	18:37	RLS
Cadmium, Total	<.0005	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Chromium, Total	0.0024	mg/L	.0005	1	EPA 200.8	08/28		RLS
Distribution of Reports:					Reviewed a	nd Appro	oved by	111

Richard Wolfe Technical Director

Page 1 of 3







M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Sample Desc: Duplicate @ Well OW-2 Baldwin Hardware Facility

Suite 400

Annapolis MD 21401

Date of Report: 09/03/13

Lab ID:

761-13-0031072

08/20/13 10:55

Collected By: pgb

Date Received:

Date Collected:

08/20/13 13:20

	Result	Unit 	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
Copper, Total	<.001	mg/L	.001	1	EPA 200.8	08/23	18:37	RLS
Iron, Total	0.03	mg/L	.02	1	EPA 200.7	08/21	10:42	LNA
Lead, Total	<.001	mg/l	.001	1	EPA 200.8	08/23	18:37	RLS
Manganese, Total	0.001	mg/L	.001	1	EPA 200.8	08/28	22:27	RLS
Nickel, Total	0.0051	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Silver, Total	<.0005	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Sodium, Total	26.8	mg/l	.5	1	EPA 200.7	08/26	12:44	LNA
Zinc, Total	0.222	mg/l	. 005	1	EPA 200.8	08/28	22:27	RLS
ORGANIC								
VOLATILES								
1,1,1-Trichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1,2,2-Tetrachloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1,2-Trichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1-Dichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichlorobenzene (o-Dichlorobenzene)	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichloropropane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,3-Dichlorobenzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,4-Dichlorobenzene	<.5	ug/l	.5	1 .	SW846 8260	08/23	00:02	GXF
2-Chloroethylvinyl Ether	<10	ug/l	10	1	SW846 8260	08/23	00:02	GXF
Benzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Bromoform (Tribromomethane)	<2	ug/l	2	1	SW846 8260	08/23	00:02	GXF
Bromomethane (Methyl Bromide)	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Carbon Tetrachloride	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chlorobenzene (Monochlorobenzene)	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chlorodibromomethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chloroethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Chloroform	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chloromethane (Methyl Chloride)	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Distribution of Reports:					Reviewed a	nd Appro	oved by:	

Richard Wolfe Technical Director

Page 2 of 3







M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Date of Report: 09/03/13

Lab ID:

761-13-0031072

Date Collected:

08/20/13 10:55

Collected By: pgb

\_

Date Received:

08/20/13 13:20

Sample Desc: Duplicate @ Well OW-2 Baldwin Hardware Facility

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
	Nesat t							Anatyst
cis-1,2-Dichloroethylene	3.7	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
cis-1,3-Dichloropropylene	<.5	ug/l	.5	1	sw846 8260	08/23	00:02	GXF
Dichlorobromomethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Dichlorodifluoromethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Ethylbenzene	<.5	ug/l	.5	1	sw846 8260	08/23	00:02	GXF
Methylene Chloride	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Tetrachloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Toluene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
trans-1,2-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
trans-1,3-Dichloropropylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Trichloroethylene	4.4	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Trichlorofluoromethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Vinyl Chloride	<1	ug/l	1	1	sw846 8260	08/23	00:02	GXF
Xylenes (Total)	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF

Distribution of Reports:

Reviewed and Approved by:

Richard Wolfe

Technical Director

Page 3 of 3







M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Date of Report: 09/03/13

Lab ID:

761-13-0031073

Date Collected:

08/20/13 07:30

Collected By:

pgb

Sample Desc: Day 1 Trip Blank Baldwin Hardware Facility

Date Received: 08/20/13 13:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
ORGANIC		<del>\</del>				MA WA 64 64 64		
VOLATILES								
1,1,1-Trichloroethane	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF
1,1,2,2-Tetrachloroethane	<.5	ug/L	.5	1	SW846 8260	08/21	21:39	GXF
1,1,2-Trichloroethane	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF
1,1-Dichloroethane	<.5	ug/l	.5	1	sw846 8260	08/21	21:39	GXF
1,1-Dichloroethylene	<.5	ug/L	.5	1	sw846 8260	08/21	21:39	GXF
1,2-Dichlorobenzene (o-Dichlorobenzene)	<.5	ug/l	.5	1	sw846 8260	08/21	21:39	GXF
1,2-Dichloroethane	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF
1,2-Dichloropropane	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF
1,3-Dichlorobenzene	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF
1,4-Dichlorobenzene	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF
2-Chloroethylvinyl Ether	<10	ug/l	10	1	SW846 8260	08/21	21:39	GXF
Benzene	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF
Bromoform (Tribromomethane)	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF
Bromomethane (Methyl Bromide)	<1	ug/l	1	1	SW846 8260	08/21	21:39	GXF
Carbon Tetrachloride	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF
Chlorobenzene (Monochlorobenzene)	<.5	ug/l	.5	1 .	SW846 8260	08/21	21:39	GXF
Chlorodibromomethane	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF
Chloroethane	<1	ug/l	1	1	SW846 8260	08/21	21:39	GXF
Chloroform	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF
Chloromethane (Methyl Chloride)	<1	ug/l	1	1	SW846 8260	08/21	21:39	GXF
cis-1,2-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF
cis-1,3-Dichloropropylene	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF
Dichlorobromomethane	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF
Dichlorodifluoromethane	<1	ug/l	1	1	SW846 8260	08/21	21:39	GXF
Ethylbenzene	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF
Methylene Chloride	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF
Tetrachloroethylene	<.5	ug/L	.5	1	SW846 8260	08/21	21:39	GXF
Toluene	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF
Distribution of Reports:		•			Reviewed a		oved by:	1.1

Richard Wolfe Technical Director

Page 1 of 2





M.J. Reider Associates. Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Sample Desc: Day 1 Trip Blank Baldwin Hardware Facility

Suite 400

Annapolis MD 21401

Date of Report:

09/03/13

Lab ID:

761-13-0031073

Date Collected:

08/20/13 07:30

Collected By:

pgb

Date Received:

08/20/13 13:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
trans-1,2-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF
trans-1,3-Dichloropropylene	<.5	ug/L	.5	1	SW846 8260	08/21	21:39	GXF
Trichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF
Trichlorofluoromethane	<1	ug/l	1	1	SW846 8260	08/21	21:39	GXF
Vinyl Chloride	<1	ug/l	1	1	SW846 8260	08/21	21:39	GXF
Xylenes (Total)	<.5	ug/l	.5	1	SW846 8260	08/21	21:39	GXF

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Richard Wolfe

Technical Director

Page 2 of 2





M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Sample Desc: Day 1 Field Blank @ OW-2 Baldwin Hardware Facility

Suite 400

Annapolis MD 21401

Date of Report:

09/03/13

761-13-0031074

Date Collected:

Lab ID:

08/20/13 11:10

Collected By: pgb

Date Received: 0

08/20/13 13:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
ORGANIC								
VOLATILES								
1,1,1-Trichloroethane	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
1,1,2,2-Tetrachloroethane	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
1,1,2-Trichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1-Dichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichlorobenzene (o-Dichlorobenzene)	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichloroethane	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichloropropane	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
1,3-Dichlorobenzene	<.5	ug/L	.5	1	sw846 8260	08/23	00:02	GXF
1,4-Dichlorobenzene	<.5	ug/L	.5	1	sw846 8260	08/23	00:02	GXF
2-Chloroethylvinyl Ether	<10	ug/l	10	1	SW846 8260	08/23	00:02	GXF
Benzene	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
Bromoform (Tribromomethane)	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
Bromomethane (Methyl Bromide)	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Carbon Tetrachloride	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chlorobenzene (Monochlorobenzene)	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
Chlorodibromomethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chloroethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Chloroform	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chloromethane (Methyl Chloride)	<1	ug/L	1	1	SW846 8260	08/23	00:02	GXF
cis-1,2-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
cis-1,3-Dichloropropylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Dichlorobromomethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Dichlorodifluoromethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Ethylbenzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Methylene Chloride	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
Tetrachloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Toluene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
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M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Sample Desc: Day 1 Field Blank @ OW-2 Baldwin Hardware Facility

Suite 400

Annapolis MD 21401

Date of Report: 09/03/13

Lab ID:

761-13-0031074

08/20/13 11:10

Date Collected: Collected By:

pgb

Date Received:

08/20/13 13:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
trans-1,2-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
trans-1,3-Dichloropropylene	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
Trichloroethylene	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
Trichlorofluoromethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Vinyl Chloride	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Xylenes (Total)	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF

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Technical Director

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M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Suite 400

Annapolis MD 21401

Date of Report:

09/03/13

Lab ID:

761-13-0031075

Date Collected:

08/20/13 11:05

Collected By: pgb

Sample Desc: Rinsate Water Blank @ OW-2 Baldwin Hardware Facility

Date Received:

08/20/13 13:20

	Result	Unit 	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
CHEMISTRY								
COLORMETRIC								
Cyanide, Total	<.004	mg/L	.004	1	10204001x	08/22	17:21	JCL
Phenols (4AAP)	<.01	mg/l	.01	1	EPA 420.4	08/28	15:58	JCL
ION CHROMAT		٠,				,		
Chloride	<1	mg/l	1	1	EPA 300.0	08/21	08:48	JAE
Sulfate	<1	mg/L	1	1	EPA 300.0	08/21	08:48	JAE
OTHER		-,				,		
Total Organic Carbon	0.5	mg/L	.5	1	SM5310 C	08/21	19:46	ALD
FIELD					•	,		
PHYSICAL								
Conductivity-Field	1	umhos/cm	1	1	SM 2510B	08/20	11:05	PGB
pH-Field	8.6	su	1	1	SM4500H-B	08/20	11:05	PGB
Temperature - Field	27.0	C	.1	1	SM 2550B	08/20	11:05	PGB
INORGANIC								
DISSOLVED								
Barium, Dissolved	<.005	mg/l	.005	1	EPA 200.8	08/23	18:37	RLS
Cadmium, Dissolved	<.0005	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Chromium, Dissolved	<.0005	mg/l	.0005	1	EPA 200.8	08/28	22:27	RLS
Copper, Dissolved	<.001	mg/l	.001	1	EPA 200.8	08/23	18:37	RLS
Iron, Dissolved	<.02	mg/l	.02	1	EPA 200.7	08/21	10:42	LNA
Lead, Dissolved	<.001	mg/l	.001	1	EPA 200.8	08/23	18:37	RLS
Manganese, Dissolved	<.001	mg/l	.001	1	EPA 200.8	08/28	22:27	RLS
Nickel, Dissolved	<.0005	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Silver, Dissolved	<.0005	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Zinc, Dissolved	<.005	mg/l	.005	1	EPA 200.8	08/28	22:27	RLS
TOTAL								
Barium, Total	<.005	mg/l	.005	1	EPA 200.8	08/23	18:37	RLS
Cadmium, Total	<0005	mg/l	.0005	1	EPA 200.8	08/23	18:37	RLS
Chromium, Total	<.0005	mg/l	.0005	1	EPA 200.8		22:27	
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M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Sample Desc: Rinsate Water Blank @ OW-2 Baldwin Hardware Facility

Suite 400

Annapolis MD 21401

Date of Report: 09/03/13

Lab ID:

761-13-0031075

Date Collected:

08/20/13 11:05

Collected By: pgb

Date Received:

08/20/13 13:20

	Result	Unit 	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
Copper, Total	<.001	mg/l	.001	1	EPA 200.8	08/23	18:37	RLS
Iron, Total	<.02	mg/L	.02	1	EPA 200.7	08/21	10:42	LNA
Lead, Total	<.001	mg/L	.001	1	EPA 200.8	08/23	18:37	RLS
Manganese, Total	<.001	mg/L	.001	1	EPA 200.8	08/28	22:27	RLS
Nickel, Total	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Silver, Total	<.0005	mg/L	.0005	1	EPA 200.8	08/23	18:37	RLS
Sodium, Total	<.5	mg/L	.5	1	EPA 200.7	08/26	12:44	LNA
Zinc, Total	<.005	mg/l	.005	1	EPA 200.8	08/28	22:27	RLS
ORGANIC						•		
VOLATILES					•			
1,1,1-Trichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1,2,2-Tetrachloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1,2-Trichloroethane	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
1,1-Dichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,1-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichlorobenzene (o-Dichlorobenzene)	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichloroethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,2-Dichloropropane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,3-Dichlorobenzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
1,4-Dichlorobenzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
2-Chloroethylvinyl Ether	<10	ug/l	10	1	SW846 8260	08/23	00:02	GXF
Benzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Bromoform (Tribromomethane)	<2	ug/l	2	1	SW846 8260	08/23	00:02	GXF
Bromomethane (Methyl Bromide)	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Carbon Tetrachloride	<.5	ug/t	.5	1	SW846 8260	08/23	00:02	GXF
Chlorobenzene (Monochlorobenzene)	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chlorodibromomethane	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Chloroethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Chloroform	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
Chloromethane (Methyl Chloride)	<1	ug/L	1	1	SW846 8260	08/23	00:02	GXF
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M.J. Reider Associates, Inc.



Attention: Robin Guynn

Reported To: Environmental Resources Mgt. Inc.

200 Harry S. Truman Pkwy

Sample Desc: Rinsate Water Blank @ OW-2 Baldwin Hardware Facility

Suite 400

Annapolis MD 21401

Date of Report:

09/03/13

Lab ID:

761-13-0031075

Date Collected:

08/20/13 11:05

Collected By:

pgb

Date Received:

08/20/13 13:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
cis-1,2-Dichloroethylene	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
cis-1,3-Dichloropropylene	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
Dichlorobromomethane	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
Dichlorodifluoromethane	<1	ug/l	1	1	SW846 8260	08/23	00:02	GXF
Ethylbenzene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Methylene Chloride	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Tetrachloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
Toluene	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF
trans-1,2-Dichloroethylene	<.5	ug/l	.5	1	SW846 8260	08/23	00:02	GXF
trans-1,3-Dichloropropylene	<.5	ug/L	.5	1	sw846 8260	08/23	00:02	GXF
Trichloroethylene	<.5	ug/L	.5	1	sw846 8260	08/23	00:02	GXF
Trichlorofluoromethane	<1	ug/L	1	1	SW846 8260	08/23	00:02	GXF
Vinyl Chloride	<1	ug/L	1	1	SW846 8260	08/23	00:02	GXF
Xylenes (Total)	<.5	ug/L	.5	1	SW846 8260	08/23	00:02	GXF

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Technical Director

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M.J. Reider Associates, Inc.



Attention: Dave Hancock

Sample Desc: Field Blank

Reported To: Baldwin Hardware Corporation

841 E. Wyomissing Blvd.

Reading PA 19611

Date of Report:

09/24/13

pgb

Lab ID:

761-13-0040151

Date Collected:

09/09/13 13:40

Collected By:

Date Received:

09/09/13 14:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
ORGANIC								
VOLATILES								
1,1-Dichloroethane	<5	ug/l	5	1	EPA 624	09/17	09:22	GXF
Bromoform (Tribromomethane)	<5	ug/l	5	1	EPA 624	09/17	09:22	GXF
Chlorobenzene (Monochlorobenzene)	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/17	09:22	GXF
Chlorodibromomethane	<5	ug/l	5	1	EPA 624	09/17	09:22	GXF
Chloroform	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/17	09:22	GXF
Chloromethane (Methyl Chloride)	<10	ug/l	10	1	EPA 624	09/17	09:22	GXF
cis-1,2-Dichloroethylene	<5	ug/L	5	1	EPA 624	09/17	09:22	GXF
trans-1,2-Dichloroethylene	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/17	09:22	GXF
Trichloroethylene	<5	ug/l	5	1	EPA 624	09/17	09:22	GXF

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M.J. Reider Associates. Inc.



Attention: Dave Hancock

Sample Desc: Tower Influent

Reported To: Baldwin Hardware Corporation

841 E. Wyomissing Blvd.

Reading PA 19611

Date of Report:

09/24/13

Lab ID:

761-13-0040152

Date Collected: Collected By:

09/09/13 13:55

pgb

Date Received:

09/09/13 14:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
ORGANIC	- <sub>ا</sub> به ارسان الما الما الما الما الما الما الما ال							
VOLATILES								
1,1-Dichloroethane	<5	ug/l	5	1	EPA 624	09/18	09:35	GXF
Bromoform (Tribromomethane)	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/18	09:35	GXF
Chlorobenzene (Monochlorobenzene)	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/18	09:35	GXF
Chlorodibromomethane	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/18	09:35	GXF
Chloroform	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/18	09:35	GXF
Chloromethane (Methyl Chloride)	<10	ug/l	10	1	EPA 624	09/18	09:35	GXF
cis-1,2-Dichloroethylene	11	ug/L	5	1	EPA 624	09/18	09:35	GXF
trans-1,2-Dichloroethylene	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/18	09:35	GXF
Trichloroethylene	68	ug/l	5	5	EPA 624	09/18	09:35	GXF

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email: K. Bitjeman - Loureiro Engineering Associates Inc

Richard Wolfe

Technical Director

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M.J. Reider Associates, Inc.



Attention: Dave Hancock

Sample Desc: Tower Effluent

Reported To: Baldwin Hardware Corporation

841 E. Wyomissing Blvd.

Reading PA 19611

Date of Report:

09/24/13

Lab ID:

761-13-0040153

Date Collected:

09/09/13 13:45

Collected By: p

pgb

Date Received:

09/09/13 14:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
ORGANIC								
VOLATILES								
1,1-Dichloroethane	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/17	22:28	GXF
Bromoform (Tribromomethane)	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/17	22:28	GXF
Chlorobenzene (Monochlorobenzene)	<5	ug/l	5	1	EPA 624	09/17	22:28	GXF
Chlorodibromomethane	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/17	22:28	GXF
Chloroform	<5	ug/l	5	1	EPA 624	09/17	22:28	GXF
Chloromethane (Methyl Chloride)	<10	ug/l	10	1	EPA 624	09/17	22:28	GXF
cis-1,2-Dichloroethylene	<5	ug/L	5	1	EPA 624	09/17	22:28	GXF
trans-1,2-Dichloroethylene	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/17	22:28	GXF
Trichloroethylene	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/17	22:28	GXF

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Richard Wolfe

Technical Director

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M.J. Reider Associates, Inc.



Attention: Dave Hancock

Sample Desc: PS-2

Reported To: Baldwin Hardware Corporation

841 E. Wyomissing Blvd.

Reading PA 19611

Date of Report:

09/24/13

Lab ID:

761-13-0040154

Date Collected:

09/09/13 13:50

Collected By:

pgb

Date Received:

09/09/13 14:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
ORGANIC								
VOLATILES								
1,1-Dichloroethane	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/17	22:28	GXF
Bromoform (Tribromomethane)	<5	ug/l	5	1	EPA 624	09/17	22:28	GXF
Chlorobenzene (Monochlorobenzene)	<5	ug/l	5	1	EPA 624	09/17	22:28	GXF
Chlorodibromomethane	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/17	22:28	GXF
Chloroform	<5	ug/l	5	1	EPA 624	09/17	22:28	GXF
Chloromethane (Methyl Chloride)	<10	ug/l	10	1	EPA 624	09/17	22:28	GXF
cis-1,2-Dichloroethylene	<b>&lt;</b> 5	ug/L	5	1	EPA 624	09/17	22:28	GXF
trans-1,2-Dichloroethylene	<5	ug/l	5	1	EPA 624	09/17	22:28	GXF
Trichloroethylene	<5	ug/l	5	1	EPA 624	09/17	22:28	GXF

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email: K. Bitjeman - Loureiro Engineering Associates Inc

Richard Wolfe Technical Director

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M.J. Reider Associates, Inc.



Attention: Dave Hancock

Sample Desc: PW-4

Reported To: Baldwin Hardware Corporation

841 E. Wyomissing Blvd.

Reading PA 19611

Date of Report:

09/24/13

Lab ID:

761-13-0040155

Date Collected:

09/09/13 14:10

Collected By:

pgb

Date Received:

09/09/13 14:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
ORGANIC								
VOLATILES								
1,1-Dichloroethane	<5	ug/l	5	1	EPA 624	09/17	22:28	GXF
Bromoform (Tribromomethane)	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/17	22:28	GXF
Chlorobenzene (Monochlorobenzene)	<5	ug/l	5	1	EPA 624	09/17	22:28	GXF
Chlorodibromomethane	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/17	22:28	GXF
Chloroform	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/17	22:28	GXF
Chloromethane (Methyl Chloride)	<10	ug/l	10	1	EPA 624	09/17	22:28	GXF
cis-1,2-Dichloroethylene	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/17	22:28	GXF
trans-1,2-Dichloroethylene	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/17	22:28	GXF
Trichloroethylene	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/17	22:28	GXF

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email: K. Bitjeman - Loureiro Engineering Associates Inc

Richard Wolfe

Technical Director

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M.J. Reider Associates, Inc.



Attention: Dave Hancock

Sample Desc: PW-5

Reported To: Baldwin Hardware Corporation

841 E. Wyomissing Blvd.

Reading PA 19611

Date of Report:

09/24/13

Lab ID:

761-13-0040156

Date Collected:

09/09/13 14:05

Collected By: pgb

Date Received:

09/09/13 14:20

	Result	Unit	Rep Limit	Dilutn Factor	Procedure	Test Date	Test Time	Analyst
ORGANIC								
VOLATILES								
1,1-Dichloroethane	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/18	09:35	GXF
Bromoform (Tribromomethane)	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/18	09:35	GXF
Chlorobenzene (Monochlorobenzene)	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/18	09:35	GXF
Chlorodibromomethane	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/18	09:35	GXF
Chloroform	<5	ug/l	5	1	EPA 624	09/18	09:35	GXF
Chloromethane (Methyl Chloride)	<10	ug/l	10	1	EPA 624	09/18	09:35	GXF
cis-1,2-Dichloroethylene	11	ug/L	5	1	EPA 624	09/18	09:35	GXF
trans-1,2-Dichloroethylene	<b>&lt;</b> 5	ug/l	5	1	EPA 624	09/18	09:35	GXF
Trichloroethylene	67	ug/l	5	5	EPA 624	09/18	09:35	GXF

Distribution of Reports:

email: K. Hinckley - Stanley Black and Decker

email: K. Bitjeman - Loureiro Engineering Associates Inc

Richard Wolfe Technical Director

Page 1 of 1



Appendix B Pennsylvania Department of Environmental Resources Water Quality Reporting Forms



# Commonwealth of Pennsylvania Department of Environmental Protection Recycling Waste Management

Date Prepared/Revised
9/3/2013
DEP USE ONLY

Date Received

# FORM 19 MUNICIPAL WASTE LANDFILLS QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form 14R, refrence the item number and identify the date prepared. The "date prepared/revised" on any attached sheets needs to match the "date prepared/revised" on this page.

The state of the s	
General Reference: Section 273.284	
Federal Regulations, Subtitle D: 258.54 and Appendix I to I	Part 258
SE	CTION A. SITE IDENTIFIER
Applicant/permittee Baldwin Hardware	Corporation
Site Name Baldwin Hardware	Facility, Reading, PA
Facility ID (as issued by DEP) PAD 002350833	
SECTION	ON B. FACILITY INFORMATION
Monitoring wells must be designed and construced in acco	rdance with Departmen standards. INDICATE THE LATITUDE AND
LONGITUDE TO THE NEAREST ONE TENTH OF A SEC	OND (DD° MM' SS.S").
Monitoring Point Number: OW-1	⊠ <sub>Well</sub> □ <sub>Spring</sub> □ <sub>Stream</sub> □ <sub>Other</sub>
	Upgradient Downgradient
Location: County Berks	Municipality: Reading
Sampling Point: Latitude: 400 19 27.4 "	Longitude: 75 0 56 ' 27.5 "
Depth to Water Level: 58.86 ft.	Measured From: Land Surface X TOC
Casing Stickup: 3.54 ft.	Elevation of Water Level: 233.74 ft./MSL
Sampling Depth: 60.94 ft.	Volume of Water Column: 13.09 gal.
Total Well Depth: 79.00 ft.	Sample Method: Pumped X Bailed X Grab
Well Purged X Yes No	Well Volumes Purged: 3
Sample Filtered (must be 0.45 micron)? X Yes	
Spring Flow Rate:	_GPM
Sample Date: (mm/dd/yy) 8/20/2013	Sample Collection Time: 0935
Sample Collector's Name: 15	
Sample Collector's Affiliation: MJ Reider	
Laboratory Performing Analysis MJ Reider	107 Angelica St. Reading, PA 19611
Were any holding times exceeded? Yes X	No If yes, please explain in comments field.
Lab Certification Number 06-003	
Lab Sample Number: 0761-13-0031064	Final Lab Analysis Completition Date: 9/3/13
Name/Affiliation of Person who Filled out Form Jame	es C. Best Jr MJ Reider Assoc., Inc
Comments:	

I.D. No. PAD 002350833

Monitoring Point No. OW-1

Sample Date 8/20/2013

## FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

#### **ANALYTES**

#### 1-Q Inorganics (Enter all data in mg/l except as noted)

ANALYTE	VALUE <sup>†</sup>	ANALYSIS METHOD NUMBER
Ammonia-Nitrogen*		
Bicarbonate (as CaCo <sub>3</sub> )*		
Calcium, Total*		
Calcium, Dissolved**		
Chemical Oxygen Demand*		
Chloride*	4.00	EPA 300.0
Fluoride		
Iron (μg/l), Total	40	epa 200.7
Iron (μg/l), Dissolved**	<20	epa 200.7
Magnesium, Total*		
Magnesium, Dissolved**		
Manganese (μg/l), Total	<1	epa 200.8
Manganese (μg/l), Dissolved**	<1	ера 200.8
Nitrate-Nitrogen		
pH (standard units), Field*	7.4	SM4500H-B
pH (standard units), Laboratory*		
Potassium, Total*		
Potassium, Dissolved**		
Sodium, Total*	1.0	ера 200.7
Sodium, Dissolved**		
Specific Conductance (µmhos/cm), Field*	464	SM 2510B
Specific Conductance (µmhos/cm), Laboratory*		
Sulfate*	19	EPA 300.0
Total Alkalinity*		
Total Dissolved Solids		
Total Organic Carbon*	<.5	SM5310 C
Total Phenolics (μg/l)	<10	EPA 420.4
Turbidity (NTU)		
Cyanide	<.004	10204001X
Temperature Before Sampling, °C	15.0	SM 2550B

<sup>\*</sup> Indicator Analyte - For comparison with detection zone analytes.

Please indicate detection limit if analyte is not detected.
 \*\* Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4).
 Remaining quarterly samples only require total metal analysis.

I.D. No. PAD 002350833

Monitoring Point No. OW-1

Sample Date 8/20/2013

## FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

#### 2-Q Organics (Enter all data in μg/l)

ANALYTE	VALUE†	ANALYSIS METHOD NUMBER
Benzene	<.5	sw846 8260
1, 2-Dibromoethane		
1, 1-Dichloroethane	<.5	sw846 8260
1, 1-Dichloroethene	<.5	sw846 8260
1, 2-Dichloroethane	<.5	sw846 8260
Cis 1, 2-Dichloroethene	<.5	sw846 8260
Trans-1,2-Dichloroethene	<.5	sw846 8260
Ethyl Benzene	<.5	sw846 8260
Methylene chloride	<.5	sw846 8260
Tetrachloroethene	<.5	sw846 8260
Toluene	<.5	sw846 8260
1, 1, 1-Trichloroethane	<.5	sw846 8260
Trichloroethene	<.5	sw846 8260
Vinyl chloride	<1	sw846 8260
Xylene	<.5	sw846 8260
2-Chloroethylvinyl Ether	<10	sw846 8260

<sup>†</sup> Please indicate detection limit if analyte is not detected.

I.D. No	PAD 0023	50833
Monitoring Po	int No.	OW-1
Sample Date	8/20	/2013

### FORM 19 ANNUAL WATER QUALITY ANALYSES

1-A Metals (Enter all data in ug/l) If initial background analyses or four consecutive annual analyses show essentially identical (within 5%) dissolved and total analyses, dissolved analyses may not be required, subject to written DEP approval.

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Arsenic, Total		
Arsenic, Dissolved		
Barium, Total	45	epa 200.8
Barium, Dissolved	49	epa 200.8
Cadmium, Total	<0.5	epa 200.8
Cadmium, Dissolved	<0.5	epa 200.8
Chromium, Total	2	epa 200.8
Chromium, Dissolved	2	epa 200.8
Copper, Total	<1	epa 200.8
Copper, Dissolved	1	epa 200.8
Lead, Total	<1	epa 200.8
Lead, Dissolved	<1	EPA 200.8
Mercury, Total		
Mercury, Dissolved		3
Selenium, Total		
Selenium, Dissolved		
Silver, Total	<0.5	EPA 200.8
Silver, Dissolved	<0.5	epa 200.8
Zinc, Total	11	epa 200.8
Zinc, Dissolved	22	ера 200.8
	,	

<sup>†</sup> Please indicate detection limit if analyte is not detected.

# FORM 19 ANNUAL WATER QUALITY ANALYSES

## 2-A Organics (Enter all data in µg/l)

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Bromoform (Tribromomethane)	<2	sw846 8260
Bromomethane (Methyl Bromide)	<1	sw846 8260
Carbon Tetrachloride	<.5	sw846 8260
Chlorobenzene	<.5	sw846 8260
Chloroethane (Ethyl Chloride)	<1	sw846 8260
Dibromochloromethane (Chlorodibromomethane)	<.5	sw846 8260
Methyl Chloride (Chloromethane)	<1	sw846 8260
3-Chloro-1-propene		
1,2-Dichlorobenzene (o-Dichlorobenzene)	<.5	sw846 8260
1,3-Dichlorobenzene (m-Dichlorobenzene)	<.5	sw846 8260
1,4-Dichlorobenzene (p-Dichlorobenzene)	<.5	sw846 8260
Dichlorodifluoromethane	<1	sw846 8260
1,2-Dichloropropane (Propylene Dichloride)	<.5	sw846 8260
Cis-1,3-Dichloropropene	<.5	sw846 8260
Trans-1,3-Dichloropropene	<.5	sw846 8260
Methyl Ethyl Ketone (2-Butanone)		
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)		
1,1,1,2-Tetrachloroethane		
1,1,2,2-Tetrachloroethane	<.5	sw846 8260
1,1,2-Trichloroethane	<.5	sw846 8260
Trichlorofluoromethane (CFC-11)	<1	sw846 8260
1,2,3-Trichloropropane		

<sup>†</sup> Please indicate detection limit if analyte is not detected.

I.D. No. PA	PAD 002350833	
Monitoring Poin	t No.	OW-1
Sample Date	8/20	/2013

Subtitle D Detection Zone Add-On List: When the MCL of any analyte is exceeded in the detection zone Form 50 monitoring, the following analytes must be monitored annually in the ground water monitoring wells.

### ORGANICS AND METALS (Enter all data in µg/l)

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Acetone		
Acrylonitrile		
Bromochloromethane (Chlorobromomethane)	П	
Bromodichloromethane (Dichlorobromomethane)	<.5	sw846 8260
Carbon Disulfide		
Chloroform (Trichloromethane)	<.5	sw846 8260
1,2-Dibromo-3-Chloropropane (DBCP)		
trans-1,4-Dichloro-2-Butene		
Methyl butyl ketone (2-Hexanone)		
Methylene Bromide (Dibromomethane)	3-1-1-1-1	
Methyl lodide (lodomethane)		
Styrene		
Vinyl Acetate		
Antimony, Total		
Beryllium, Total		
Cobalt, Total		
Nickel, Total	3.1	EPA 200.8
Thallium, Total		
Vanadium, Total		
Nickel, Dissolved	2.9	EPA 200.8

<sup>†</sup> Please indicate detection limit if analyte is not detected.

.D. No. PAD 00235083		50833
Monitoring Poin	t No.	OW-1
Sample Date	8/20	/2013

## FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

### 4 Qualitatively Identified Organic Compounds

List at leaste ten volatile organic compounds not otherwise identified in this section. Their identification should be based upon those compounds showing the greatest apparent concentration from the peaks of a mass spectrum of each sample. These ten compounds shall be identified but the concentration of each is not required.

<u>Constituent</u>	<u>CAS Number</u>



# Commonwealth of Pennsylvania Department of Environmental Protection Recycling Waste Management

Date Prepared/Revised
9/3/2013
DEP USE ONLY
Date Received

# FORM 19 MUNICIPAL WASTE LANDFILLS QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form 14R, refrence the item number and identify the date prepared. The "date prepared/revised" on any attached sheets needs to match the "date prepared/revised" on this page.

Forderal Degulations, Cubitle Du 250 54 and Appendix I to Dort 250	
Federal Regulations, Subtitle D: 258.54 and Appendix I to Part 258	
SECTION A. SITE IDENTIFIER	Plater N. E.
Applicant/permittee Baldwin Hardware Corporation	
Site Name Baldwin Hardware Facility, Reading, PA	
Facility ID (as issued by DEP) PAD 002350833	
SECTION B. FACILITY INFORMATION	
Monitoring wells must be designed and construced in accordance with Departmen standards. INDICATE THE LATITUDE AND	
LONGITUDE TO THE NEAREST ONE TENTH OF A SECOND (DD° MM' SS.S").	
Monitoring Point Number: OW-2 Spring Stream Other	
Upgradient Downgradient	
Location: County Berks Municipality: Reading	
Sampling Point: Latitude: 40 <sub>0</sub> 19 · 22.4 " Longitude: 75 o 56 · 26.1 "	
Depth to Water Level: 52.31 ft. Measured From: Land Surface X TOC	
Casing Stickup: 3.50 ft. Elevation of Water Level: 199.61 ft./MSL	
Sampling Depth: 67.08 ft. Volume of Water Column: 31.00	gal.
Total Well Depth: 100.00 ft. Sample Method: Pumped X Bailed X Grab	
Well Purged X Yes No Well Volumes Purged: 3	
Sample Filtered (must be 0.45 micron)? X Yes No	
Spring Flow Rate:GPM	
Sample Date: (mm/dd/yy) 8/20/2013 Sample Collection Time: 1045	
Sample Collector's Name: 17.5	
Sample Collector's Affiliation: MJ Reider	
Laboratory Performing Analysis MJ Reider 107 Angelica St. Reading, PA 19611	
Were any holding times exceeded? Yes X No If yes, please explain in comments field.	
Lab Certification Number 06-003	
Lab Sample Number: 0761-13-0031065 Final Lab Analysis Completition Date: 9/3/13	
Name/Affiliation of Person who Filled out Form James C. Best Jr MJ Reider Assoc., Inc	
Comments:	

# FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

#### **ANALYTES**

#### 1-Q Inorganics (Enter all data in mg/l except as noted)

ANALYTE	VALUE <sup>†</sup>	ANALYSIS METHOD NUMBER
Ammonia-Nitrogen*		
Bicarbonate (as CaCo <sub>3</sub> )*		
Calcium, Total*		
Calcium, Dissolved**		
Chemical Oxygen Demand*		
Chloride*	37.00	EPA 300.0
Fluoride		
Iron (μg/l), Total	20	epa 200.7
Iron (μg/l), Dissolved**	<20	epa 200.7
Magnesium, Total*		
Magnesium, Dissolved**		
Manganese (μg/l), Total	<1	epa 200.8
Manganese (μg/l), Dissolved**	<1	epa 200.8
Nitrate-Nitrogen		
pH (standard units), Field*	7.4	sm4500h-b
pH (standard units), Laboratory*		
Potassium, Total*		
Potassium, Dissolved**		
Sodium, Total*	27.1	epa 200.7
Sodium, Dissolved**		
Specific Conductance (µmhos/cm), Field*	708	sm 2510b
Specific Conductance (µmhos/cm), Laboratory*		
Sulfate*	73	EPA 300.0
Total Alkalinity*		
Total Dissolved Solids		
Total Organic Carbon*	0.8	SM5310 C
Total Phenolics (μg/l)	<10	EPA 420.4
Turbidity (NTU)		
Cyanide	<.004	10204001X
Temperature Before Sampling, °C	17.5	SM 2550B

<sup>\*</sup> Indicator Analyte - For comparison with detection zone analytes.

<sup>†</sup> Please indicate detection limit if analyte is not detected.

<sup>\*\*</sup> Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4). Remaining quarterly samples only require total metal analysis.

I.D. No.	PAD 002350833	
Monitoring Po	int No.	OW-2
Sample Date	8/20	/2013

# FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

## 2-Q Organics (Enter all data in μg/l)

ANALYTE	VALUE†	ANALYSIS METHOD NUMBER
Benzene	<.5	sw846 8260
1, 2-Dibromoethane		
1, 1-Dichloroethane	<.5	sw846 8260
1, 1-Dichloroethene	<.5	sw846 8260
1, 2-Dichloroethane	<.5	sw846 8260
Cis 1, 2-Dichloroethene	3.6	sw846 8260
Trans-1,2-Dichloroethene	<.5	sw846 8260
Ethyl Benzene	<.5	sw846 8260
Methylene chloride	<.5	sw846 8260
Tetrachloroethene	<.5	sw846 8260
Toluene	<.5	sw846 8260
1, 1, 1-Trichloroethane	<.5	sw846 8260
Trichloroethene	4.4	sw846 8260
Vinyl chloride	<1	sw846 8260
Xylene	<.5	sw846 8260
2-Chloroethylvinyl Ether	<10	sw846 8260

<sup>†</sup> Please indicate detection limit if analyte is not detected.

## FORM 19 ANNUAL WATER QUALITY ANALYSES

1-A Metals (Enter all data in ug/l) If initial background analyses or four consecutive annual analyses show essentially identical (within 5%) dissolved and total analyses, dissolved analyses may not be required, subject to written DEP approval.

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Arsenic, Total		
Arsenic, Dissolved		
Barium, Total	48	epa 200.8
Barium, Dissolved	48	epa 200.8
Cadmium, Total	<0.5	epa 200.8
Cadmium, Dissolved	<0.5	epa 200.8
Chromium, Total	2.3	epa 200.8
Chromium, Dissolved	2.1	epa 200.8
Copper, Total	<1	epa 200.8
Copper, Dissolved	<1	epa 200.8
Lead, Total	<1	epa 200.8
Lead, Dissolved	<1	EPA 200.8
Mercury, Total		
Mercury, Dissolved		
Selenium, Total		
Selenium, Dissolved		
Silver, Total	<0.5	EPA 200.8
Silver, Dissolved	<0.5	epa 200.8
Zinc, Total	212	epa 200.8
Zinc, Dissolved	205	epa 200.8
		4:

<sup>†</sup> Please indicate detection limit if analyte is not detected.

# FORM 19 ANNUAL WATER QUALITY ANALYSES

## 2-A Organics (Enter all data in µg/l)

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Bromoform (Tribromomethane)	<2	sw846 8260
Bromomethane (Methyl Bromide)	<1	sw846 8260
Carbon Tetrachloride	<.5	sw846 8260
Chlorobenzene	<.5	sw846 8260
Chloroethane (Ethyl Chloride)	<1	sw846 8260
Dibromochloromethane (Chlorodibromomethane)	<.5	sw846 8260
Methyl Chloride (Chloromethane)	<1	sw846 8260
3-Chloro-1-propene		
1,2-Dichlorobenzene (o-Dichlorobenzene)	<.5	sw846 8260
1,3-Dichlorobenzene (m-Dichlorobenzene)	<.5	sw846 8260
1,4-Dichlorobenzene (p-Dichlorobenzene)	<.5	sw846 8260
Dichlorodifluoromethane	<1	sw846 8260
1,2-Dichloropropane (Propylene Dichloride)	<.5	sw846 8260
Cis-1,3-Dichloropropene	<.5	sw846 8260
Trans-1,3-Dichloropropene	<.5	sw846 8260
Methyl Ethyl Ketone (2-Butanone)		
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)		
1,1,1,2-Tetrachloroethane	0.	
1,1,2,2-Tetrachloroethane	<.5	sw846 8260
1,1,2-Trichloroethane	<.5	sw846 8260
Trichlorofluoromethane (CFC-11)	<1	sw846 8260
1,2,3-Trichloropropane		

<sup>†</sup> Please indicate detection limit if analyte is not detected.

I.D. No. PA	PAD 002350833	
Monitoring Point	t No.	OW-2
Sample Date 8/20		2013

Subtitle D Detection Zone Add-On List: When the MCL of any analyte is exceeded in the detection zone Form 50 monitoring, the following analytes must be monitored annually in the ground water monitoring wells.

## ORGANICS AND METALS (Enter all data in µg/l)

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Acetone		
Acrylonitrile		
Bromochloromethane (Chlorobromomethane)		
Bromodichloromethane (Dichlorobromomethane)	<.5	sw846 8260
Carbon Disulfide		
Chloroform (Trichloromethane)	<.5	sw846 8260
1,2-Dibromo-3-Chloropropane (DBCP)		
trans-1,4-Dichloro-2-Butene		
Methyl butyl ketone (2-Hexanone)		
Methylene Bromide (Dibromomethane)		
Methyl lodide (lodomethane)		
Styrene		
Vinyl Acetate		
Antimony, Total		
Beryllium, Total		
Cobalt, Total		
Nickel, Total	5	EPA 200.8
Thallium, Total		
Vanadium, Total		
Nickel, Dissolved	4.8	EPA 200.8

<sup>†</sup> Please indicate detection limit if analyte is not detected.

I.D. No. P	AD 0023	50833
Monitoring Point No.		OW-2
Sample Date 8/20		/2013

## FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

### 4 Qualitatively Identified Organic Compounds

List at leaste ten volatile organic compounds not otherwise identified in this section. Their identification should be based upon those compounds showing the greatest apparent concentration from the peaks of a mass spectrum of each sample. These ten compounds shall be identified but the concentration of each is not required.

<u>Constituent</u>	CAS Number
	-
	411.511.51

#### 2540-PM-BWM00041 6/2005



# Commonwealth of Pennsylvania Department of Environmental Protection Recycling Waste Management

Date Prepared/Revised
9/3/2013
DEP USE ONLY

Date Received

# FORM 19 MUNICIPAL WASTE LANDFILLS QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form 14R, refrence the item number and identify the date prepared. The "date prepared/revised" on any attached sheets needs to match the "date prepared/revised" on this page.

	11012
General Reference: Section 273.284	
Federal Regulations, Subtitle D: 258.54 and Appendix I to	o Part 258
SE	ECTION A. SITE IDENTIFIER
Applicant/permittee Baldwin Hardware	e Corporation
Site Name Baldwin Hardware	re Facility, Reading, PA
Facility ID (as issued by DEP) PAD 002350833	
SECTI	TION B. FACILITY INFORMATION
Monitoring wells must be designed and construced in acco	cordance with Departmen standards. INDICATE THE LATITUDE AND
LONGITUDE TO THE NEAREST ONE TENTH OF A SEC	COND (DD° MM' SS.S").
Monitoring Point Number: OW-3D	
	Upgradient Downgradient
Location: County Berks	Municipality: Reading
Sampling Point: Latitude: 400 19 · 22.2 ·	Longitude: 75 0 56 ' 40.7 "
Depth to Water Level: 41.49 ft.	Measured From:  Land Surface  X TOC
Casing Stickup: 3.50 ft.	Elevation of Water Level: 227.88 ft./MSL
Sampling Depth: 72.95 ft.	Volume of Water Column: 19.88 gal
Total Well Depth: 200.50 ft.	Sample Method: Pumped X Bailed X Grab
Well Purged X Yes No	Well Volumes Purged: 3
Sample Filtered (must be 0.45 micron)?	□ No
Spring Flow Rate:	GPM
Sample Date: (mm/dd/yy) 8/20/2013	Sample Collection Time: 0910
Sample Collector's Name: 14.6	
Sample Collector's Affiliation: MJ Reider	
Laboratory Performing Analysis MJ Reider	107 Angelica St. Reading, PA 19611
Were any holding times exceeded? Yes X	No If yes, please explain in comments field.
Lab Certification Number 06-003	
Lab Sample Number: 0761-13-0031067	Final Lab Analysis Completition Date: 9/3/13
Name/Affiliation of Person who Filled out Form Jam	mes C. Best Jr MJ Reider Assoc., Inc
Comments:	

# FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

#### **ANALYTES**

### 1-Q Inorganics (Enter all data in mg/l except as noted)

ANALYTE	VALUE <sup>†</sup>	ANALYSIS METHOD NUMBER
Ammonia-Nitrogen*		
Bicarbonate (as CaCo <sub>3</sub> )*		
Calcium, Total*		
Calcium, Dissolved**		
Chemical Oxygen Demand*		
Chloride*	7.00	EPA 300.0
Fluoride		
Iron (μg/I), Total	130	ера 200.7
Iron (μg/I), Dissolved**	120	epa 200.7
Magnesium, Total*		
Magnesium, Dissolved**		
Manganese (μg/l), Total	5	ера 200.8
Manganese (μg/I), Dissolved**	5	ера 200.8
Nitrate-Nitrogen		
pH (standard units), Field*	7.4	sm4500h-b
pH (standard units), Laboratory*		
Potassium, Total*		
Potassium, Dissolved**		
Sodium, Total*	1.3	ера 200.7
Sodium, Dissolved**		
Specific Conductance (µmhos/cm), Field*	501	sm 2510b
Specific Conductance (µmhos/cm), Laboratory*		
Sulfate*	31	EPA 300.0
Total Alkalinity*		
Total Dissolved Solids		
Total Organic Carbon*	0.6	SM5310 C
Total Phenolics (μg/l)	<10	EPA 420.4
Turbidity (NTU)		
Cyanide	<.004	10204001X
Temperature Before Sampling, °C	14.6	SM 2550B

<sup>\*</sup> Indicator Analyte - For comparison with detection zone analytes.

<sup>†</sup> Please indicate detection limit if analyte is not detected.

<sup>\*\*</sup> Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4). Remaining quarterly samples only require total metal analysis.

# FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

## 2-Q Organics (Enter all data in μg/l)

ANALYTE	VALUE†	ANALYSIS METHOD NUMBER
Benzene	39.4	sw846 8260
1, 2-Dibromoethane		
1, 1-Dichloroethane	<.5	sw846 8260
1, 1-Dichloroethene	<.5	sw846 8260
1, 2-Dichloroethane	1.7	sw846 8260
Cis 1, 2-Dichloroethene	<.5	sw846 8260
Trans-1,2-Dichloroethene	<.5	sw846 8260
Ethyl Benzene	<.5	sw846 8260
Methylene chloride	<.5	sw846 8260
Tetrachloroethene	<.5	sw846 8260
Toluene	<.5	sw846 8260
1, 1, 1-Trichloroethane	<.5	sw846 8260
Trichloroethene	<.5	sw846 8260
Vinyl chloride	<1	sw846 8260
Xylene	<.5	sw846 8260
2-Chloroethylvinyl Ether	<10	sw846 8260

<sup>†</sup> Please indicate detection limit if analyte is not detected.

	I.D. No.	D. No. PAD 002350833		
Monitoring Point No.		oint No.	OW-3D	
Sample Date 8/20		e 8/2	0/2013	

1-A Metals (Enter all data in ug/l) If initial background analyses or four consecutive annual analyses show essentially identical (within 5%) dissolved and total analyses, dissolved analyses may not be required, subject to written DEP approval.

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Arsenic, Total		
Arsenic, Dissolved		
Barium, Total	113	epa 200.8
Barium, Dissolved	120	ера 200.8
Cadmium, Total	<0.5	ера 200.8
Cadmium, Dissolved	<0.5	ера 200.8
Chromium, Total	3.7	epa 200.8
Chromium, Dissolved	1.5	epa 200.8
Copper, Total	<1	ера 200.8
Copper, Dissolved	<1	epa 200.8
Lead, Total	<1	epa 200.8
Lead, Dissolved	<1	EPA 200.8
Mercury, Total	The state of the s	
Mercury, Dissolved		
Selenium, Total		
Selenium, Dissolved		
Silver, Total	<0.5	EPA 200.8
Silver, Dissolved	<0.5	ера 200.8
Zinc, Total	<5	ера 200.8
Zinc, Dissolved	<5	epa 200.8
		4

<sup>†</sup> Please indicate detection limit if analyte is not detected.

# FORM 19 ANNUAL WATER QUALITY ANALYSES

### 2-A Organics (Enter all data in µg/l)

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Bromoform (Tribromomethane)	<2	sw846 8260
Bromomethane (Methyl Bromide)	<1	sw846 8260
Carbon Tetrachloride	<.5	sw846 8260
Chlorobenzene	<.5	sw846 8260
Chloroethane (Ethyl Chloride)	<1	sw846 8260
Dibromochloromethane (Chlorodibromomethane)	<.5	sw846 8260
Methyl Chloride (Chloromethane)	<1	sw846 8260
3-Chloro-1-propene		
1,2-Dichlorobenzene (o-Dichlorobenzene)	<.5	sw846 8260
1,3-Dichlorobenzene (m-Dichlorobenzene)	<.5	sw846 8260
1,4-Dichlorobenzene (p-Dichlorobenzene)	<.5	sw846 8260
Dichlorodifluoromethane	<1	sw846 8260
1,2-Dichloropropane (Propylene Dichloride)	<.5	sw846 8260
Cis-1,3-Dichloropropene	<.5	sw846 8260
Trans-1,3-Dichloropropene	<.5	sw846 8260
Methyl Ethyl Ketone (2-Butanone)		
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)		
1,1,1,2-Tetrachloroethane		
1,1,2,2-Tetrachloroethane	<.5	sw846 8260
1,1,2-Trichloroethane	<.5	sw846 8260
Trichlorofluoromethane (CFC-11)	<1	sw846 8260
1,2,3-Trichloropropane		

<sup>†</sup> Please indicate detection limit if analyte is not detected.

I.D. No	PAD 002350833		
Monitoring Point No.		OW-3D	
Sample Date 8/20		0/2013	

Subtitle D Detection Zone Add-On List: When the MCL of any analyte is exceeded in the detection zone Form 50 monitoring, the following analytes must be monitored annually in the ground water monitoring wells.

### ORGANICS AND METALS (Enter all data in µg/l)

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Acetone		
Acrylonitrile		
Bromochloromethane (Chlorobromomethane)	1 2 = 34	
Bromodichloromethane (Dichlorobromomethane)	<.5	sw846 8260
Carbon Disulfide		
Chloroform (Trichloromethane)	<.5	sw846 8260
1,2-Dibromo-3-Chloropropane (DBCP)		
trans-1,4-Dichloro-2-Butene		
Methyl butyl ketone (2-Hexanone)		
Methylene Bromide (Dibromomethane)		
Methyl Iodide (Iodomethane)		
Styrene		
Vinyl Acetate		
Antimony, Total		
Beryllium, Total		
Cobalt, Total		
Nickel, Total	2.9	EPA 200.8
Thallium, Total		
Vanadium, Total		
Nickel, Dissolved	3.4	EPA 200.8

<sup>†</sup> Please indicate detection limit if analyte is not detected.

## FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

## 4 Qualitatively Identified Organic Compounds

List at leaste ten volatile organic compounds not otherwise identified in this section. Their identification should be based upon those compounds showing the greatest apparent concentration from the peaks of a mass spectrum of each sample. These ten compounds shall be identified but the concentration of each is not required.

<u>Constituent</u>	CAS Number
	-
н	,
	n n

#### 2540-PM-BWM00041 6/2005



# Commonwealth of Pennsylvania Department of Environmental Protection Recycling Waste Management

Date Prepared/Revised
9/3/2013
DEP USE ONLY
Date Received

# FORM 19 MUNICIPAL WASTE LANDFILLS QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form 14R, refrence the item number and identify the date prepared. The "date prepared/revised" on any attached sheets needs to match the "date prepared/revised" on this page.

General Reference: Section 273.284		
Federal Regulations, Subtitle D: 258.	54 and Appendix I to Part 258	
	SECTION A. SITE	IDENTIFIER
Applicant/permittee	Baldwin Hardware Corporation	
Site Name	Baldwin Hardware Facility, Readin	g, PA
Facility ID (as issued by DEP)	PAD 002350833	
	SECTION B. FACILITY	INFORMATION
	nd construced in accordance with Dep	partmen standards. INDICATE THE LATITUDE AND SS.S").
Monitoring Point Number: OW	<i>I</i> -3S	⊠ <sub>Well</sub> □ <sub>Spring</sub> □ <sub>Stream</sub> □ <sub>Other</sub> □ <sub>Upgradient</sub> □ <sub>Downgradient</sub>
Location: County Ber	ks	Municipality: Reading
Sampling Point: Latitude: 40	00 19 21.9 "	Longitude: 75 0 56 ' 70.8 "
Depth to Water Level: 46.4	44 ft.	Measured From: Land Surface X TOC
Casing Stickup: 3.42	ft.	Elevation of Water Level: 222.93 ft./MSL
Sampling Depth: 46.93	ft.	Volume of Water Column: 5.32 gal.
Total Well Depth: 89.00	ft.	Sample Method: Pumped X Bailed X Grab
Well Purged X Yes	☐ No	Well Volumes Purged: 3
Sample Filtered (must be 0.45 micror		
Spring Flow Rate:	GPM	
Sample Date: (mm/dd/yy)	8/20/2013	Sample Collection Time: 0830
Sample Collector's Name: 15	5.7	
Sample Collector's Affiliation:	MJ Reider	
Laboratory Performing Analysis	MJ Reider	107 Angelica St. Reading, PA 19611
Were any holding times exceeded	d? Yes X No If yes, p	olease explain in comments field.
Lab Certification Number06-	-003	<u></u>
Lab Sample Number: 0761-1	13-0031066	Final Lab Analysis Completition Date: 9/3/13
Name/Affiliation of Person who Filled Comments:	out Form James C. Best Jr	MJ Reider Assoc., Inc
		0-

# FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

### **ANALYTES**

#### 1-Q Inorganics (Enter all data in mg/l except as noted)

ANALYTE	VALUE <sup>†</sup>	ANALYSIS METHOD NUMBER
Ammonia-Nitrogen*		
Bicarbonate (as CaCo <sub>3</sub> )*		
Calcium, Total*		
Calcium, Dissolved**		
Chemical Oxygen Demand*		
Chloride*	90.00	EPA 300.0
Fluoride		
Iron (μg/l), Total	9470	epa 200.7
Iron (μg/I), Dissolved**	<20	epa 200.7
Magnesium, Total*		
Magnesium, Dissolved**		
Manganese (µg/l), Total	231	epa 200.8
Manganese (µg/I), Dissolved**	5	epa 200.8
Nitrate-Nitrogen		
pH (standard units), Field*	6.5	sm4500h-b
pH (standard units), Laboratory*		
Potassium, Total*		
Potassium, Dissolved**		
Sodium, Total*	37.3	ера 200.7
Sodium, Dissolved**		
Specific Conductance (µmhos/cm), Field*	875	sm 2510b
Specific Conductance (µmhos/cm), Laboratory*		
Sulfate*	40	EPA 300.0
Total Alkalinity*		
Total Dissolved Solids		
Total Organic Carbon*	0.6	SM5310 C
Total Phenolics (μg/l)	<10	EPA 420.4
Turbidity (NTU)		
Cyanide	<.004	10204001X
Temperature Before Sampling, °C	15.7	SM 2550B

<sup>\*</sup> Indicator Analyte - For comparison with detection zone analytes.

<sup>†</sup> Please indicate detection limit if analyte is not detected.

<sup>\*\*</sup> Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4). Remaining quarterly samples only require total metal analysis.

# FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

## 2-Q Organics (Enter all data in µg/l)

ANALYTE	VALUE†	ANALYSIS METHOD NUMBER
Benzene	<.5	sw846 8260
1, 2-Dibromoethane		
1, 1-Dichloroethane	<.5	sw846 8260
1, 1-Dichloroethene	<.5	sw846 8260
1, 2-Dichloroethane	<.5	sw846 8260
Cis 1, 2-Dichloroethene	<.5	sw846 8260
Trans-1,2-Dichloroethene	<.5	sw846 8260
Ethyl Benzene	<.5	sw846 8260
Methylene chloride	<.5	sw846 8260
Tetrachloroethene	<.5	sw846 8260
Toluene	<.5	sw846 8260
1, 1, 1-Trichloroethane	<.5	sw846 8260
Trichloroethene	<.5	sw846 8260
Vinyl chloride	<1	sw846 8260
Xylene	<.5	sw846 8260
2-Chloroethylvinyl Ether	<10	sw846 8260
	151 H 251 H	

<sup>†</sup> Please indicate detection limit if analyte is not detected.

I.D. No. PAD 002350833

Monitoring Point No. OW-3S

Sample Date

8/20/2013

## FORM 19 ANNUAL WATER QUALITY ANALYSES

1-A Metals (Enter all data in ug/l) If initial background analyses or four consecutive annual analyses show essentially identical (within 5%) dissolved and total analyses, dissolved analyses may not be required, subject to written DEP approval.

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Arsenic, Total		
Arsenic, Dissolved		
Barium, Total	186	ера 200.8
Barium, Dissolved	154	epa 200.8
Cadmium, Total	<0.5	epa 200.8
Cadmium, Dissolved	<0.5	epa 200.8
Chromium, Total	1950	epa 200.8
Chromium, Dissolved	3.2	epa 200.8
Copper, Total	34	epa 200.8
Copper, Dissolved	<1	epa 200.8
Lead, Total	<1	epa 200.8
Lead, Dissolved	<1	EPA 200.8
Mercury, Total		
Mercury, Dissolved	*	
Selenium, Total		
Selenium, Dissolved		
Silver, Total	<0.5	EPA 200.8
Silver, Dissolved	<0.5	epa 200.8
Zinc, Total	5	ера 200.8
Zinc, Dissolved	<5	epa 200.8
	u du Raxe	
	1.000	

<sup>†</sup> Please indicate detection limit if analyte is not detected.

# FORM 19 ANNUAL WATER QUALITY ANALYSES

### 2-A Organics (Enter all data in µg/l)

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Bromoform (Tribromomethane)	<2	sw846 8260
Bromomethane (Methyl Bromide)	<1	sw846 8260
Carbon Tetrachloride	<.5	sw846 8260
Chlorobenzene	<.5	sw846 8260
Chloroethane (Ethyl Chloride)	<1	sw846 8260
Dibromochloromethane (Chlorodibromomethane)	<.5	sw846 8260
Methyl Chloride (Chloromethane)	<1	sw846 8260
3-Chloro-1-propene		
1,2-Dichlorobenzene (o-Dichlorobenzene)	<.5	sw846 8260
1,3-Dichlorobenzene (m-Dichlorobenzene)	<.5	sw846 8260
1,4-Dichlorobenzene (p-Dichlorobenzene)	<.5	sw846 8260
Dichlorodifluoromethane	<1	sw846 8260
1,2-Dichloropropane (Propylene Dichloride)	<.5	sw846 8260
Cis-1,3-Dichloropropene	<.5	sw846 8260
Trans-1,3-Dichloropropene	<.5	sw846 8260
Methyl Ethyl Ketone (2-Butanone)		
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)		
1,1,1,2-Tetrachloroethane		
1,1,2,2-Tetrachloroethane	<.5	sw846 8260
1,1,2-Trichloroethane	<.5	sw846 8260
Trichlorofluoromethane (CFC-11)	<1	sw846 8260
1,2,3-Trichloropropane		

<sup>†</sup> Please indicate detection limit if analyte is not detected.

# FORM 19 ANNUAL WATER QUALITY ANALYSES

Subtitle D Detection Zone Add-On List: When the MCL of any analyte is exceeded in the detection zone Form 50 monitoring, the following analytes must be monitored annually in the ground water monitoring wells.

### ORGANICS AND METALS (Enter all data in µg/l)

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Acetone		
Acrylonitrile		
Bromochloromethane (Chlorobromomethane)		
Bromodichloromethane (Dichlorobromomethane)	<.5	sw846 8260
Carbon Disulfide		
Chloroform (Trichloromethane)	<.5	sw846 8260
1,2-Dibromo-3-Chloropropane (DBCP)		
trans-1,4-Dichloro-2-Butene		
Methyl butyl ketone (2-Hexanone)		
Methylene Bromide (Dibromomethane)		
Methyl lodide (lodomethane)		
Styrene		
Vinyl Acetate		
Antimony, Total		
Beryllium, Total		
Cobalt, Total		
Nickel, Total	166	EPA 200.8
Thallium, Total		
Vanadium, Total		
Nickel, Dissolved	65.1	EPA 200.8

<sup>†</sup> Please indicate detection limit if analyte is not detected.

I.D. No.	PAD 0	02350833
Monitorin	g Point No.	OW-3S
Sample I	Date 8	/20/2013

## FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

## 4 Qualitatively Identified Organic Compounds

List at leaste ten volatile organic compounds not otherwise identified in this section. Their identification should be based upon those compounds showing the greatest apparent concentration from the peaks of a mass spectrum of each sample. These ten compounds shall be identified but the concentration of each is not required.

<u>Constituent</u>	<u>CAS Number</u>
-	В
	10 00 00 00 00 00 00 00 00 00 00 00 00 0

#### 2540-PM-BWM00041 6/2005



# Commonwealth of Pennsylvania Department of Environmental Protection Recycling Waste Management

Date Prepared/Revised
9/3/2013
DEP USE ONLY
Date Received

# FORM 19 MUNICIPAL WASTE LANDFILLS QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form 14R, refrence the item number and identify the date prepared. The "date prepared/revised" on any attached sheets needs to match the "date prepared/revised" on this page.

General Reference: Section 273.284			
Federal Regulations, Subtitle D: 258.54	William Colon and Colon		
	SECTION A. SITE II	DENTIFIER	
Applicant/permittee	Baldwin Hardware Corporation		
Site Name	Baldwin Hardware Facility, Reading	PA	
Facility ID (as issued by DEP)	PAD 002350833		
	SECTION B. FACILITY I	NFORMATION	
Monitoring wells must be designed and	construced in accordance with Depa	rtmen standards. INDICATE THE LATITUDE ANI	)
LONGITUDE TO THE NEAREST ONE	TENTH OF A SECOND (DD° MM' S	The state of the s	
Monitoring Point Number: PS-2		□     Spring □     Stream □     Other	
		Upgradient Downgradient	
Location: County Berks	3	Municipality: Reading	
Sampling Point: Latitude: 400	19 · 25.4 "	Longitude: 75 0 56 ' 28.7 "	
Depth to Water Level: N/A	ft.	Measured From: Land Surface	X TOC
Casing Stickup: 2.74		Elevation of Water Level: N/A	ft./MSL
Sampling Depth: N/A	ft.	Volume of Water Column: N/A	gal.
Total Well Depth: 380.00	ft.	Sample Method: X Pumped Bailed	X Grab
Well Purged X Yes	☐ No	Well Volumes Purged: N/A	
Sample Filtered (must be 0.45 micron)	? X Yes No		
Spring Flow Rate:	GPM		
Sample Date: (mm/dd/yy)	3/20/2013	Sample Collection Time: 1135	
Sample Collector's Name: 17.2	2		
Sample Collector's Affiliation:	MJ Reider		
Laboratory Performing Analysis	MJ Reider	107 Angelica St. Reading, PA 19611	
Were any holding times exceeded?	Yes X No If yes, ple	ease explain in comments field.	
Lab Certification Number06-0	03	_	
Lab Sample Number: 0761-13	-0031068	Final Lab Analysis Completition Date:	9/3/13
Name/Affiliation of Person who Filled o	ut Form James C. Best Jr I	//J Reider Assoc., Inc	
Comments:			
	940		

# FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

#### **ANALYTES**

## 1-Q Inorganics (Enter all data in mg/l except as noted)

ANALYTE	VALUE <sup>†</sup>	ANALYSIS METHOD NUMBER
Ammonia-Nitrogen*		
Bicarbonate (as CaCo <sub>3</sub> )*		
Calcium, Total*		
Calcium, Dissolved**		
Chemical Oxygen Demand*		
Chloride*	34.00	EPA 300.0
Fluoride		
Iron (μg/l), Total	<20	epa 200.7
Iron (µg/l), Dissolved**	<20	epa 200.7
Magnesium, Total*		
Magnesium, Dissolved**		
Manganese (µg/I), Total	2	epa 200.8
Manganese (μg/I), Dissolved**	<1	epa 200.8
Nitrate-Nitrogen		
pH (standard units), Field*	7.1	sm4500h-b
pH (standard units), Laboratory*		
Potassium, Total*		
Potassium, Dissolved**		
Sodium, Total*	10.9	ера 200.7
Sodium, Dissolved**		
Specific Conductance (µmhos/cm), Field*	722	sm 2510b
Specific Conductance (µmhos/cm), Laboratory*		
Sulfate*	60	EPA 300.0
Total Alkalinity*		
Total Dissolved Solids		
Total Organic Carbon*	0.8	SM5310 C
Total Phenolics (μg/l)	<10	EPA 420.4
Turbidity (NTU)		
Cyanide	<.004	10204001X
Temperature Before Sampling, °C	17.2	SM 2550B

<sup>\*</sup> Indicator Analyte - For comparison with detection zone analytes.

<sup>†</sup> Please indicate detection limit if analyte is not detected.

<sup>\*\*</sup> Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4). Remaining quarterly samples only require total metal analysis.

I.D. No. PAD 002350833

Monitoring Point No. PS-2

Sample Date

8/20/2013

## FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

## 2-Q Organics (Enter all data in μg/l)

ANALYTE	VALUE†	ANALYSIS METHOD NUMBER
Benzene	<.5	sw846 8260
1, 2-Dibromoethane		
1, 1-Dichloroethane	<.5	sw846 8260
1, 1-Dichloroethene	<.5	sw846 8260
1, 2-Dichloroethane	<.5	sw846 8260
Cis 1, 2-Dichloroethene	<.5	sw846 8260
Trans-1,2-Dichloroethene	<.5	sw846 8260
Ethyl Benzene	<.5	sw846 8260
Methylene chloride	<.5	sw846 8260
Tetrachloroethene	<.5	sw846 8260
Toluene	<.5	sw846 8260
1, 1, 1-Trichloroethane	<.5	sw846 8260
Trichloroethene	0.6	sw846 8260
Vinyl chloride	<1	sw846 8260
Xylene	<.5	sw846 8260
2-Chloroethylvinyl Ether	<10	sw846 8260
		ź

<sup>†</sup> Please indicate detection limit if analyte is not detected.

I.D. No	PAD 002350833	
Monitoring Point No.		PS-2
Sample Date 8/20		2013

1-A Metals (Enter all data in ug/l) If initial background analyses or four consecutive annual analyses show essentially identical (within 5%) dissolved and total analyses, dissolved analyses may not be required, subject to written DEP approval.

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Arsenic, Total		
Arsenic, Dissolved		
Barium, Total	55	epa 200.8
Barium, Dissolved	54	epa 200.8
Cadmium, Total	<0.5	epa 200.8
Cadmium, Dissolved	<0.5	ера 200.8
Chromium, Total	5.6	epa 200.8
Chromium, Dissolved	5.8	ера 200.8
Copper, Total	4	epa 200.8
Copper, Dissolved	3	epa 200.8
Lead, Total	1	epa 200.8
Lead, Dissolved	<1	EPA 200.8
Mercury, Total		
Mercury, Dissolved		,
Selenium, Total		
Selenium, Dissolved		
Silver, Total	<0.5	EPA 200.8
Silver, Dissolved	<0.5	ера 200.8
Zinc, Total	13	epa 200.8
Zinc, Dissolved	8	epa 200.8
- Charles		

<sup>†</sup> Please indicate detection limit if analyte is not detected.

## FORM 19 ANNUAL WATER QUALITY ANALYSES

## 2-A Organics (Enter all data in µg/l)

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Bromoform (Tribromomethane)	<2	sw846 8260
Bromomethane (Methyl Bromide)	<1	sw846 8260
Carbon Tetrachloride	<.5	sw846 8260
Chlorobenzene	<.5	sw846 8260
Chloroethane (Ethyl Chloride)	<1	sw846 8260
Dibromochloromethane (Chlorodibromomethane)	<.5	sw846 8260
Methyl Chloride (Chloromethane)	<1	sw846 8260
3-Chloro-1-propene		
1,2-Dichlorobenzene (o-Dichlorobenzene)	<.5	sw846 8260
1,3-Dichlorobenzene (m-Dichlorobenzene)	<.5	sw846 8260
1,4-Dichlorobenzene (p-Dichlorobenzene)	<.5	sw846 8260
Dichlorodifluoromethane	<1	sw846 8260
1,2-Dichloropropane (Propylene Dichloride)	<.5	sw846 8260
Cis-1,3-Dichloropropene	<.5	sw846 8260
Trans-1,3-Dichloropropene	<.5	sw846 8260
Methyl Ethyl Ketone (2-Butanone)		
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)		
1,1,1,2-Tetrachloroethane	<b>d</b>	
1,1,2,2-Tetrachloroethane	<.5	sw846 8260
1,1,2-Trichloroethane	<.5	sw846 8260
Trichlorofluoromethane (CFC-11)	<1	sw846 8260
1,2,3-Trichloropropane		

<sup>†</sup> Please indicate detection limit if analyte is not detected.

I.D. NoF	PAD 002350833		
Monitoring Point No.		PS-2	
Sample Date	8/20/	2013	

Subtitle D Detection Zone Add-On List: When the MCL of any analyte is exceeded in the detection zone Form 50 monitoring, the following analytes must be monitored annually in the ground water monitoring wells.

### ORGANICS AND METALS (Enter all data in µg/l)

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Acetone		
Acrylonitrile		
Bromochloromethane (Chlorobromomethane)	an recommendation of	
Bromodichloromethane (Dichlorobromomethane)	<.5	sw846 8260
Carbon Disulfide		
Chloroform (Trichloromethane)	1.6	sw846 8260
1,2-Dibromo-3-Chloropropane (DBCP)		
trans-1,4-Dichloro-2-Butene		
Methyl butyl ketone (2-Hexanone)		
Methylene Bromide (Dibromomethane)		
Methyl lodide (lodomethane)		
Styrene		
Vinyl Acetate		
Antimony, Total		
Beryllium, Total		
Cobalt, Total	=	
Nickel, Total	5.4	EPA 200.8
Thallium, Total		
Vanadium, Total		
Nickel, Dissolved	4.2	EPA 200.8
Thoron, Bloodings		2.7.200.0

<sup>†</sup> Please indicate detection limit if analyte is not detected.

I.D. No. P	PAD 002350833		
Monitoring Point No.		PS-2	
Sample Date	8/20/	2013	

## FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

## 4 Qualitatively Identified Organic Compounds

List at leaste ten volatile organic compounds not otherwise identified in this section. Their identification should be based upon those compounds showing the greatest apparent concentration from the peaks of a mass spectrum of each sample. These ten compounds shall be identified but the concentration of each is not required.

Constituent	CAS Number
	38.0

#### 2540-PM-BWM00041 6/2005



# Commonwealth of Pennsylvania Department of Environmental Protection Recycling Waste Management

Date Prepared/Revised
9/3/2013
DEP USE ONLY

Date Received

# FORM 19 MUNICIPAL WASTE LANDFILLS QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form 14R, refrence the item number and identify the date prepared. The "date prepared/revised" on any attached sheets needs to match the "date prepared/revised" on this page.

General Reference: Section 273.284			
Federal Regulations, Subtitle D: 258.			
	SECTION A. SITE II	DENTIFIER	
Applicant/permittee	Baldwin Hardware Corporation		
Site Name	Baldwin Hardware Facility, Reading	, PA	
Facility ID (as issued by DEP)	PAD 002350833		
	SECTION B. FACILITY I	INFORMATION	
Monitoring wells must be designed ar	nd construced in accordance with Depa	artmen standards. INDICATE THE LATITUDE AND	
LONGITUDE TO THE NEAREST ON	IE TENTH OF A SECOND (DD $^{ m o}$ MM $^{ m i}$ S		
Monitoring Point Number: PW	<i>I-</i> 4		
-		Upgradient Downgradient	
Location: County Ber	rks	Municipality: Reading	
and the second s	00 19 19 "	Longitude: 75 0 56 ' 29.7 "	
Depth to Water Level: 73.5		Measured From: Land Surface X TOC	
Casing Stickup: 0.00	ft.	Elevation of Water Level:161.42ft./MSL	
Sampling Depth: 73.81	ft.	Volume of Water Column: N/A gal.	
Total Well Depth: 297.00	ft.	Sample Method: X Pumped Bailed X Grab	
Well Purged X Yes	☐ No	Well Volumes Purged: N/A	
Sample Filtered (must be 0.45 micror	n)? X Yes No		
Spring Flow Rate:	GPM		
Sample Date: (mm/dd/yy)	8/20/2013	Sample Collection Time: 1215	
Sample Collector's Name: 16	3.5		
Sample Collector's Affiliation:	MJ Reider		
Laboratory Performing Analysis	MJ Reider	107 Angelica St. Reading, PA 19611	
Were any holding times exceeded	d? Yes X No If yes, plo	ease explain in comments field.	
Lab Certification Number06-	-003	_	
Lab Sample Number: 0761-13-0031070		Final Lab Analysis Completition Date: 9/3/13	
Name/Affiliation of Person who Filled	out Form James C. Best Jr I	MJ Reider Assoc., Inc	
Comments:			

# FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

#### **ANALYTES**

### 1-Q Inorganics (Enter all data in mg/l except as noted)

ANALYTE	VALUE <sup>†</sup>	ANALYSIS METHOD NUMBER
Ammonia-Nitrogen*		
Bicarbonate (as CaCo <sub>3</sub> )*		
Calcium, Total*		
Calcium, Dissolved**		7 W/ E
Chemical Oxygen Demand*		
Chloride*	94.00	EPA 300.0
Fluoride		
Iron (μg/l), Total	<20	epa 200.7
Iron (μg/l), Dissolved**	<20	epa 200.7
Magnesium, Total*		
Magnesium, Dissolved**		
Manganese (μg/l), Total	<1	ера 200.8
Manganese (μg/l), Dissolved**	<1	epa 200.8
Nitrate-Nitrogen		70
pH (standard units), Field*	6.6	sm4500h-b
pH (standard units), Laboratory*		
Potassium, Total*		
Potassium, Dissolved**		i i i i i i i i i i i i i i i i i i i
Sodium, Total*	43.5	epa 200.7
Sodium, Dissolved**		
Specific Conductance (µmhos/cm), Field*	969	sm 2510b
Specific Conductance (µmhos/cm), Laboratory*		
Sulfate*	66	EPA 300.0
Total Alkalinity*		
Total Dissolved Solids		
Total Organic Carbon*	0.7	SM5310 C
Total Phenolics (µg/l)	<10	EPA 420.4
Turbidity (NTU)		
Cyanide	<.004	10204001X
Temperature Before Sampling, °C	16.5	SM 2550B

<sup>\*</sup> Indicator Analyte - For comparison with detection zone analytes.

<sup>†</sup> Please indicate detection limit if analyte is not detected.

<sup>\*\*</sup> Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4). Remaining quarterly samples only require total metal analysis.

# FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

## 2-Q Organics (Enter all data in μg/l)

ANALYTE	VALUE†	ANALYSIS METHOD NUMBER
Benzene	<.5	SW846 8260
1, 2-Dibromoethane		
1, 1-Dichloroethane	0.6	SW846 8260
1, 1-Dichloroethene	<.5	SW846 8260
1, 2-Dichloroethane	<.5	SW846 8260
Cis 1, 2-Dichloroethene	1.3	SW846 8260
Trans-1,2-Dichloroethene	<.5	SW846 8260
Ethyl Benzene	<.5	SW846 8260
Methylene chloride	<.5	SW846 8260
Tetrachloroethene	0.6	SW846 8260
Toluene	<.5	SW846 8260
1, 1, 1-Trichloroethane	2.2	SW846 8260
Trichloroethene	1.2	SW846 8260
Vinyl chloride	<1	SW846 8260
Xylene	<.5	SW846 8260
2-Chloroethylvinyl Ether	<10	SW846 8260
		×

<sup>†</sup> Please indicate detection limit if analyte is not detected.

# FORM 19 ANNUAL WATER QUALITY ANALYSES

1-A Metals (Enter all data in ug/l) If initial background analyses or four consecutive annual analyses show essentially identical (within 5%) dissolved and total analyses, dissolved analyses may not be required, subject to written DEP approval.

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Arsenic, Total		
Arsenic, Dissolved		
Barium, Total	108	epa 200.8
Barium, Dissolved	110	epa 200.8
Cadmium, Total	<0.5	epa 200.8
Cadmium, Dissolved	<0.5	epa 200.8
Chromium, Total	5.3	epa 200.8
Chromium, Dissolved	5.4	epa 200.8
Copper, Total	2	epa 200.8
Copper, Dissolved	2	epa 200.8
Lead, Total	<1	epa 200.8
Lead, Dissolved	<1	EPA 200.8
Mercury, Total		
Mercury, Dissolved		
Selenium, Total		
Selenium, Dissolved		
Silver, Total	<0.5	EPA 200.8
Silver, Dissolved	<0.5	ера 200.8
Zinc, Total	8	epa 200.8
Zinc, Dissolved	9	epa 200.8

<sup>†</sup> Please indicate detection limit if analyte is not detected.

# FORM 19 ANNUAL WATER QUALITY ANALYSES

## 2-A Organics (Enter all data in µg/l)

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Bromoform (Tribromomethane)	<2	SW846 8260
Bromomethane (Methyl Bromide)	<1	SW846 8260
Carbon Tetrachloride	<.5	SW846 8260
Chlorobenzene	<.5	SW846 8260
Chloroethane (Ethyl Chloride)	<1	SW846 8260
Dibromochloromethane (Chlorodibromomethane)	<.5	SW846 8260
Methyl Chloride (Chloromethane)	<1	SW846 8260
3-Chloro-1-propene		
1,2-Dichlorobenzene (o-Dichlorobenzene)	<.5	SW846 8260
1,3-Dichlorobenzene (m-Dichlorobenzene)	<.5	SW846 8260
1,4-Dichlorobenzene (p-Dichlorobenzene)	<.5	SW846 8260
Dichlorodifluoromethane	<1	SW846 8260
1,2-Dichloropropane (Propylene Dichloride)	<.5	SW846 8260
Cis-1,3-Dichloropropene	<.5	SW846 8260
Trans-1,3-Dichloropropene	<.5	SW846 8260
Methyl Ethyl Ketone (2-Butanone)		
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)		
1,1,1,2-Tetrachloroethane		
1,1,2,2-Tetrachloroethane	<.5	SW846 8260
1,1,2-Trichloroethane	<.5	SW846 8260
Trichlorofluoromethane (CFC-11)	<1	SW846 8260
1,2,3-Trichloropropane		

<sup>†</sup> Please indicate detection limit if analyte is not detected.

I.D. No	PAD 002350833		
Monitoring Po	int No.	PW-4	
Sample Date	8/20	/2013	

Subtitle D Detection Zone Add-On List: When the MCL of any analyte is exceeded in the detection zone Form 50 monitoring, the following analytes must be monitored annually in the ground water monitoring wells.

### ORGANICS AND METALS (Enter all data in µg/l)

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Acetone		
Acrylonitrile		
Bromochloromethane (Chlorobromomethane)	prise on the state of	
Bromodichloromethane (Dichlorobromomethane)	<.5	SW846 8260
Carbon Disulfide		
Chloroform (Trichloromethane)	<.5	SW846 8260
1,2-Dibromo-3-Chloropropane (DBCP)		
trans-1,4-Dichloro-2-Butene		
Methyl butyl ketone (2-Hexanone)		
Methylene Bromide (Dibromomethane)		
Methyl Iodide (Iodomethane)		
Styrene		
Vinyl Acetate		
Antimony, Total		
Beryllium, Total		
Cobalt, Total		
Nickel, Total	5.1	EPA 200.8
Thallium, Total		
Vanadium, Total		
Nickel, Dissolved	5.4	EPA 200.8

<sup>†</sup> Please indicate detection limit if analyte is not detected.

I.D. No. F	PAD 002350833		
Monitoring Poi	nt No.	PW-4	
Sample Date 8/20		/2013	

## FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

### 4 Qualitatively Identified Organic Compounds

List at leaste ten volatile organic compounds not otherwise identified in this section. Their identification should be based upon those compounds showing the greatest apparent concentration from the peaks of a mass spectrum of each sample. These ten compounds shall be identified but the concentration of each is not required.

<u>Constituent</u>	<u>CAS Number</u>
	1303
	3

#### 2540-PM-BWM00041 6/2005



# Commonwealth of Pennsylvania Department of Environmental Protection Recycling Waste Management

Date Prepared/Revised
9/3/2013
DEP USE ONLY
Date Received

# FORM 19 MUNICIPAL WASTE LANDFILLS QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form 14R, refrence the item number and identify the date prepared. The "date prepared/revised" on any attached sheets needs to match the "date prepared/revised" on this page.

General Reference: Section 273.284		
Federal Regulations, Subtitle D: 258.54	4 and Appendix I to Part 258	
	SECTION A. SITE II	DENTIFIER
Applicant/permittee	Baldwin Hardware Corporation	- 20 Section 1
Site Name	Baldwin Hardware Facility, Reading	, PA
Facility ID (as issued by DEP)	PAD 002350833	
	SECTION B. FACILITY	INFORMATION
Monitoring wells must be designed and	I construced in accordance with Depa	rtmen standards. INDICATE THE LATITUDE AND
LONGITUDE TO THE NEAREST ONE	TENTH OF A SECOND (DD° MM' S	S.S").
Monitoring Point Number: PW-5	5	⊠ <sub>Well</sub> □ <sub>Spring</sub> □ <sub>Stream</sub> □ <sub>Other</sub>
		Upgradient Downgradient
Location: County Berks	S	Municipality: Reading
Sampling Point: Latitude: 40c	Correct Valuations	Longitude: 75 0 56 ' 29 "
Depth to Water Level: 55.20		Measured From: Land Surface X TOC
Casing Stickup: 0.00	ft.	Elevation of Water Level: 168.91 ft./MSL
Sampling Depth: 55.52	ft.	Volume of Water Column: N/A gal.
Total Well Depth: 197.00	ft.	Sample Method: X Pumped Bailed X Grab
Well Purged X Yes	□ No	Well Volumes Purged: N/A
Sample Filtered (must be 0.45 micron)	? X Yes No	
Spring Flow Rate:	GPM	
Sample Date: (mm/dd/yy)	8/20/2013	Sample Collection Time:1155
Sample Collector's Name: 16.4	4	
Sample Collector's Affiliation:	MJ Reider	
Laboratory Performing Analysis	MJ Reider	107 Angelica St. Reading, PA 19611
Were any holding times exceeded?	Yes X No If yes, pl	ease explain in comments field.
Lab Certification Number06-0	03	_
Lab Sample Number: 0761-13	-0031071	Final Lab Analysis Completition Date: 9/3/13
Name/Affiliation of Person who Filled o	out Form James C. Best Jr I	MJ Reider Assoc., Inc
Comments:		
	/3/P	

# FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

#### **ANALYTES**

### 1-Q Inorganics (Enter all data in mg/l except as noted)

ANALYTE	VALUE <sup>†</sup>	ANALYSIS METHOD NUMBER
Ammonia-Nitrogen*		
Bicarbonate (as CaCo <sub>3</sub> )*		
Calcium, Total*		
Calcium, Dissolved**		
Chemical Oxygen Demand*		
Chloride*	66.00	EPA 300.0
Fluoride		
Iron (µg/I), Total	<20	ера 200.7
Iron (μg/l), Dissolved**	<20	epa 200.7
Magnesium, Total*		
Magnesium, Dissolved**		
Manganese (µg/l), Total	3	epa 200.8
Manganese (µg/I), Dissolved**	<1	epa 200.8
Nitrate-Nitrogen		
pH (standard units), Field*	7.6	sm4500h-b
pH (standard units), Laboratory*		
Potassium, Total*		
Potassium, Dissolved**		
Sodium, Total*	30.3	epa 200.7
Sodium, Dissolved**		
Specific Conductance (µmhos/cm), Field*	822	sm 2510b
Specific Conductance (µmhos/cm), Laboratory*		
Sulfate*	44	EPA 300.0
Total Alkalinity*		
Total Dissolved Solids		
Total Organic Carbon*	<.5	SM5310 C
Total Phenolics (μg/l)	<10	EPA 420.4
Turbidity (NTU)		
Cyanide	<.004	10204001X
Temperature Before Sampling, °C	16.4	SM 2550B

<sup>\*</sup> Indicator Analyte - For comparison with detection zone analytes.

<sup>†</sup> Please indicate detection limit if analyte is not detected.

<sup>\*\*</sup> Total and dissolved analysis required only in conjunction with additional annual metals sampling (see page 4). Remaining quarterly samples only require total metal analysis.

I.D. No. PAD 002350833

Monitoring Point No. PW-5

Sample Date 8/20/2013

# FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

## 2-Q Organics (Enter all data in μg/l)

ANALYTE	VALUE†	ANALYSIS METHOD NUMBER
Benzene	<.5	sw846 8260
1, 2-Dibromoethane		
1, 1-Dichloroethane	<.5	sw846 8260
1, 1-Dichloroethene	<.5	sw846 8260
1, 2-Dichloroethane	<.5	sw846 8260
Cis 1, 2-Dichloroethene	7.4	sw846 8260
Trans-1,2-Dichloroethene	<.5	sw846 8260
Ethyl Benzene	<.5	sw846 8260
Methylene chloride	<.5	sw846 8260
Tetrachloroethene	1.8	sw846 8260
Toluene	<.5	sw846 8260
1, 1, 1-Trichloroethane	1.2	sw846 8260
Trichloroethene	45	sw846 8260
Vinyl chloride	<1	sw846 8260
Xylene	<.5	sw846 8260
2-Chloroethylvinyl Ether	<10	sw846 8260
		ų.

<sup>†</sup> Please indicate detection limit if analyte is not detected.

I.D. NoF	PAD 0023	50833
Monitoring Poi	nt No.	PW-5
Sample Date	8/20	/2013

1-A Metals (Enter all data in ug/l) If initial background analyses or four consecutive annual analyses show essentially identical (within 5%) dissolved and total analyses, dissolved analyses may not be required, subject to written DEP approval.

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Arsenic, Total		
Arsenic, Dissolved		
Barium, Total	124	epa 200.8
Barium, Dissolved	120	epa 200.8
Cadmium, Total	<0.5	epa 200.8
Cadmium, Dissolved	<0.5	epa 200.8
Chromium, Total	2.3	epa 200.8
Chromium, Dissolved	2.7	epa 200.8
Copper, Total	<1	epa 200.8
Copper, Dissolved	1	epa 200.8
Lead, Total	<1	epa 200.8
Lead, Dissolved	<1	EPA 200.8
Mercury, Total		
Mercury, Dissolved		
Selenium, Total		
Selenium, Dissolved		
Silver, Total	<0.5	EPA 200.8
Silver, Dissolved	<0.5	epa 200.8
Zinc, Total	13	epa 200.8
Zinc, Dissolved	12	epa 200.8
and the second s		

<sup>†</sup> Please indicate detection limit if analyte is not detected.

# FORM 19 ANNUAL WATER QUALITY ANALYSES

## 2-A Organics (Enter all data in µg/l)

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Bromoform (Tribromomethane)	<2	sw846 8260
Bromomethane (Methyl Bromide)	<1	sw846 8260
Carbon Tetrachloride	<.5	sw846 8260
Chlorobenzene	<.5	sw846 8260
Chloroethane (Ethyl Chloride)	<1	sw846 8260
Dibromochloromethane (Chlorodibromomethane)	<.5	sw846 8260
Methyl Chloride (Chloromethane)	<1	sw846 8260
3-Chloro-1-propene		
1,2-Dichlorobenzene (o-Dichlorobenzene)	<.5	sw846 8260
1,3-Dichlorobenzene (m-Dichlorobenzene)	<.5	sw846 8260
1,4-Dichlorobenzene (p-Dichlorobenzene)	<.5	sw846 8260
Dichlorodifluoromethane	<1	sw846 8260
1,2-Dichloropropane (Propylene Dichloride)	<.5	sw846 8260
Cis-1,3-Dichloropropene	<.5	sw846 8260
Trans-1,3-Dichloropropene	<.5	sw846 8260
Methyl Ethyl Ketone (2-Butanone)		
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)		
1,1,1,2-Tetrachloroethane		
1,1,2,2-Tetrachloroethane	<.5	sw846 8260
1,1,2-Trichloroethane	<.5	sw846 8260
Trichlorofluoromethane (CFC-11)	<1	sw846 8260
1,2,3-Trichloropropane		

<sup>†</sup> Please indicate detection limit if analyte is not detected.

I.D. No.	PAD 002350833		
Monitoring Point No.		PW-5	
Sample Date	8/20	/2013	

Subtitle D Detection Zone Add-On List: When the MCL of any analyte is exceeded in the detection zone Form 50 monitoring, the following analytes must be monitored annually in the ground water monitoring wells.

## ORGANICS AND METALS (Enter all data in µg/l)

ANALYTE	VALUE	ANALYSIS METHOD NUMBER
Acetone		
Acrylonitrile		
Bromochloromethane (Chlorobromomethane)	N M 45-2000 N N	
Bromodichloromethane (Dichlorobromomethane)	<.5	sw846 8260
Carbon Disulfide		
Chloroform (Trichloromethane)	<.5	sw846 8260
1,2-Dibromo-3-Chloropropane (DBCP)		
trans-1,4-Dichloro-2-Butene		
Methyl butyl ketone (2-Hexanone)		
Methylene Bromide (Dibromomethane)		
Methyl lodide (lodomethane)		
Styrene		
Vinyl Acetate		
Antimony, Total		
Beryllium, Total		
Cobalt, Total		
Nickel, Total	5.4	EPA 200.8
Thallium, Total		
Vanadium, Total		
Nickel, Dissolved	5.6	EPA 200.8

<sup>†</sup> Please indicate detection limit if analyte is not detected.

I.D. No.	PAD 0023	PAD 002350833		
Monitoring F	Point No.	PW-5		
Sample Date	e 8/20/	/2013		
	NAME OF TAXABLE PARTY.			

## FORM 19 QUARTERLY AND ANNUAL WATER QUALITY ANALYSES

## 4 Qualitatively Identified Organic Compounds

List at leaste ten volatile organic compounds not otherwise identified in this section. Their identification should be based upon those compounds showing the greatest apparent concentration from the peaks of a mass spectrum of each sample. These ten compounds shall be identified but the concentration of each is not required.

<u>Constituent</u>	CAS Number
	2
	ж